Quest®

Binary Tree Integration for Notes | BTCal 20.13

User Guide

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Section 1: Introduction

1.1 Document Conventions

Integration for Notes is the full name of the "heart" of Quest's Binary Tree complete coexistence solution. Integration for Notes itself is made up of several discrete functions which will be referred to throughout this document by their shorter names.

The two primary pieces of Integration for Notes are contained on the Domino coexistence server (messaging and calendaring workflow or "BTCal") and on the Windows coexistence server (calendar free/busy lookups or "FreeBusy"). When referring to the actual lookup of free and busy time between Domino and Exchange, "free/busy" is used; when referring to the Integration for Notes product, "FreeBusy" is used. Although FreeBusy is part of Integration for Notes, since it requires its own configuration, it has a separate user guide. While this guide touches on the entire coexistence suite of products, it is focused on the BTCal setup.

"Coexistence" (or "Coex") is used to refer to both the state of interoperability between Domino and Exchange environments, and as the suite of Binary Tree products that create an ideal coex environment—Directory Sync Pro and Integration for Notes.

1.2 Need for Coexistence

Coexistence is required when multiple messaging environments need to exist together over an extended period of time due to mergers and acquisitions, or during email system migrations. Transparent, highly functional, and stable communication throughout the email environment is mission-critical, making coexistence much more than just a system that ensures email is delivered in a timely fashion.

Coexistence between Domino and Microsoft Exchange is successful if the following criteria are met:

- Messages on the destination platform appear exactly the way they appear in the source platform including attachments, rich text, embedded images, and forms

- Cross platform calendaring, including free/busy lookups, is functional (see the FreeBusy user guide for additional information)

- Email directories are synchronized, allowing transparent access to addressing information (see the Directory Sync Pro for Domino and Active Directory user guide for additional information)

1.3 Integration for Notes: Product Overview

Integration for Notes delivers the highest levels of functionality, stability, and scalability for connection between Microsoft Exchange and Domino. It provides high-fidelity exchange of mail and calendar data. It also intercepts mail and calendar data traveling between the environments, and if necessary, modifies the address and content portions of the message header and body to make coexistence between environments more transparent, functional, and user-friendly. In addition, it preserves user workflow between Domino and Exchange.

"Workflow," or the flow of data or information between users, applications, or a user and an application is illustrated by the image below, showing the different types of workflow managed in a coexistence environment.
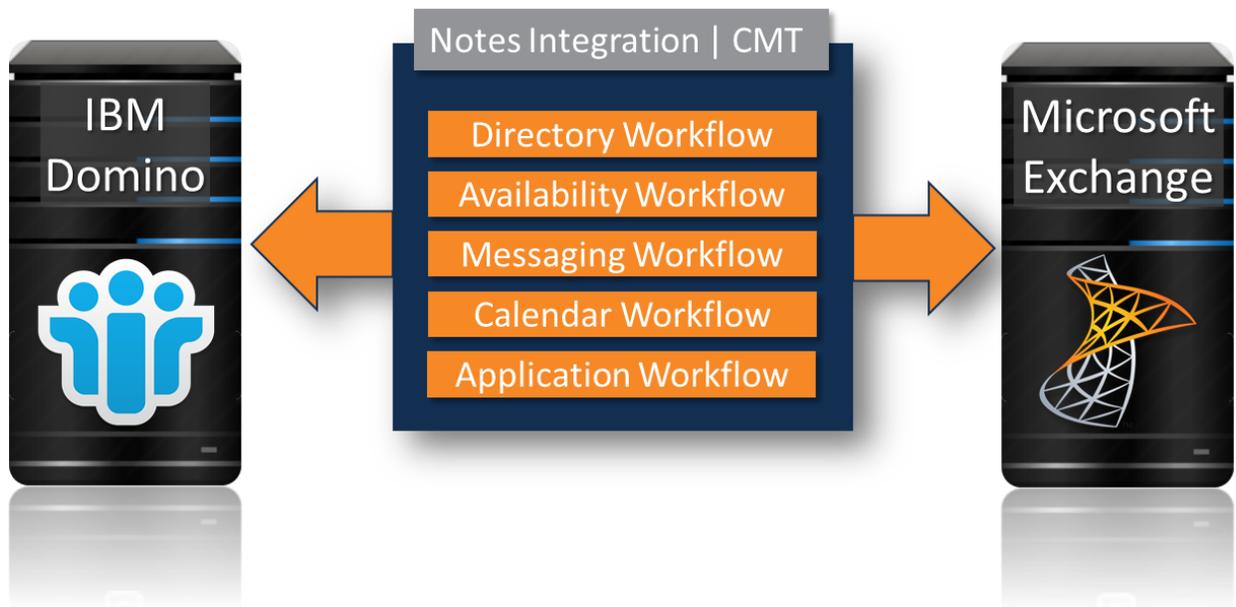
Directory Workflow – Directory Sync Pro, although a separate Binary Tree product, is part of a rich coexistence solution; it is used to establish directory synchronization between the two platforms to make sure that user addressing is transparent and functional regardless of the migration status of the users.

Availability Workflow - Provides for calendar free/busy lookups to ensure that users can obtain schedule availability information for other users regardless of the system users are associated with (see the FreeBusy user guide)

Messaging Workflow - Enables the high-availability, high-performance, and high-fidelity exchange of data that preserves email related workflow, including Notes document and database links

Calendar Workflow - Ensures that corresponding calendar items function correctly between Notes and Outlook users when creating, updating, rescheduling, and cancelling meetings regardless of a user's migration status (see the FreeBusy user guide)

Application Workflow - Preserves a user's ability to receive Notes application-originated emails and to perform the actions required by these emails

1.4   Coexistence Environment

A coexistence environment can contain as little as one server (if only managing message and calendar workflow), but an ideal environment would contain a minimum of three servers as illustrated below:

- Domino Coexistence Server
- Windows Coexistence Server (for FreeBusy only)
- SQL Coexistence Server (for Directory Sync Pro)

An optional component of Integration for Notes is Zero-touch Application Remediation (ZApp), which allows Outlook users to view and act on email-enabled Notes applications. This is configured on the Domino coex server.
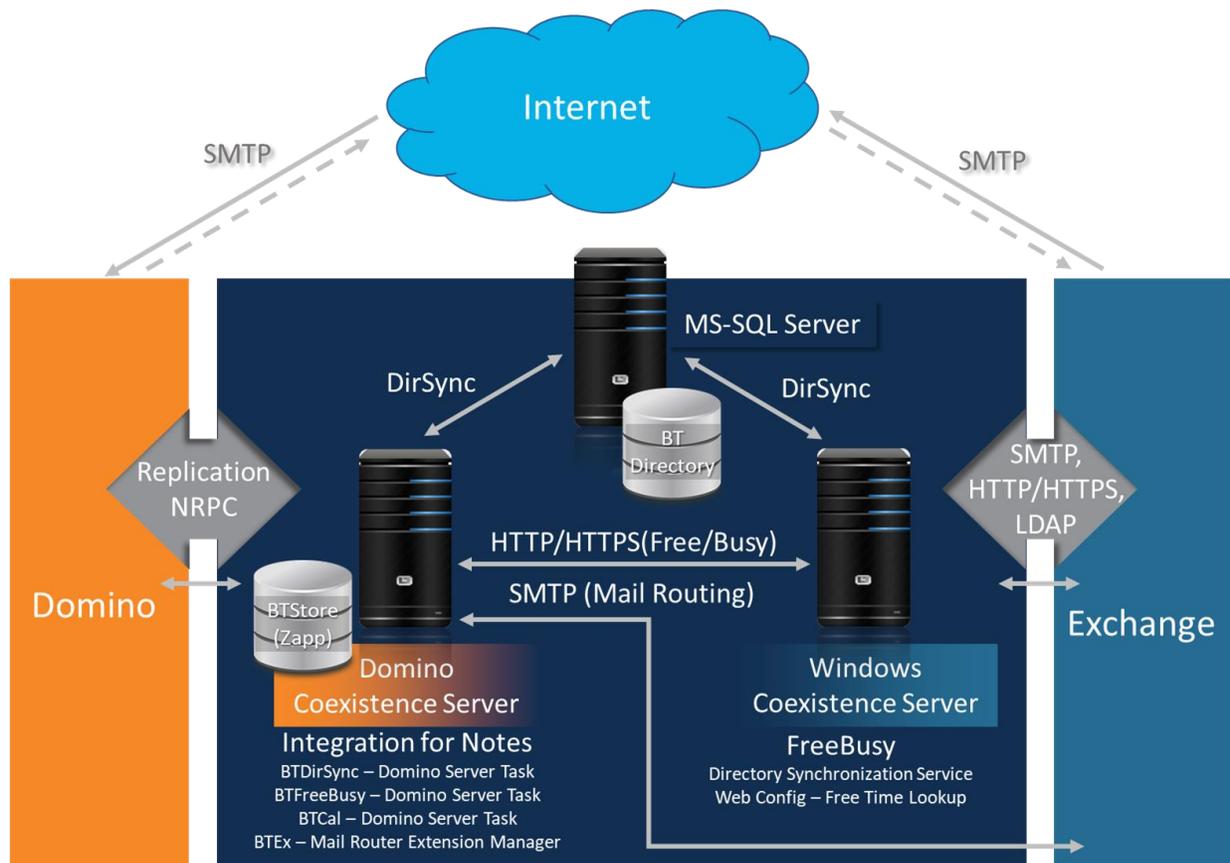
In the illustration above, one of the components is the **Domino Coexistence Server**, which is responsible for supporting coexistence server tasks at the Domino end of the environment. These server tasks include:

- Messaging/calendaring/application coexistence
- Free/busy lookup (see the FreeBusy user guide)

It also houses several Domino databases used by Integration for Notes, and, if ZApp is enabled, the BTStore database.

The **Windows Coexistence Server**, on the other hand, is designed to support coexistence on the Exchange side with free/busy lookups.

The **SQL Coexistence Server** (in the middle of the illustration) can be a dedicated or shared SQL Server and contains a SQL database which is used for name and email address directory synchronization between Domino and Exchange.

Messaging

The coexistence environment facilitates mail flow between Domino and Exchange. It allows you to configure how email addressing is handled between the two platforms. It also manages calendar workflow between Domino and Exchange users, allowing them to schedule/update/reschedule and cancel single occurrence and recurring meetings irrespective of their migration status or email platform.

> **NOTE !**   Items migrated with Notes Migrator will not have access to the full coexistence functionality until a post-migration workflow has been implemented. Refer to Appendix I: Processing Repeating Meetings for information regarding unsupported items.

Directory Synchronization Using Directory Sync Pro

Directory Sync Pro for Notes automates the manual work of keeping Exchange and Domino environments in sync, by performing one off or scheduled synchronization of new and changed data from one or more Domino Directories and Windows Active Directory

FreeBusy

A Domino environment implements its calendar free/busy queries differently from the way Exchange does…which means that natively, one environment cannot see the availability of users in the other environment. To make the two environments communicate with each other, Integration for Notes uses FreeBusy, which works seamlessly with other components of the coexistence environment, so that Notes users can view the free/busy status of Exchange users…and vice versa. (For more information, see the FreeBusy user guide.)

Section 2: Features and Advantages

2.1 Features

Integration for Notes offers a number of improvements over native Domino/Exchange message and calendar interoperability, including:

- User friendly display name formatting for mail messages and calendar invitations
- Support for repeating meetings, including updates, invitee tracking and room and resource reservations
- Customizable user alerts when updates to repeating meetings cannot be processed correctly due to native Domino and Exchange differences
- Database, view, and doc links are displayed in Outlook the same way they are displayed in Notes
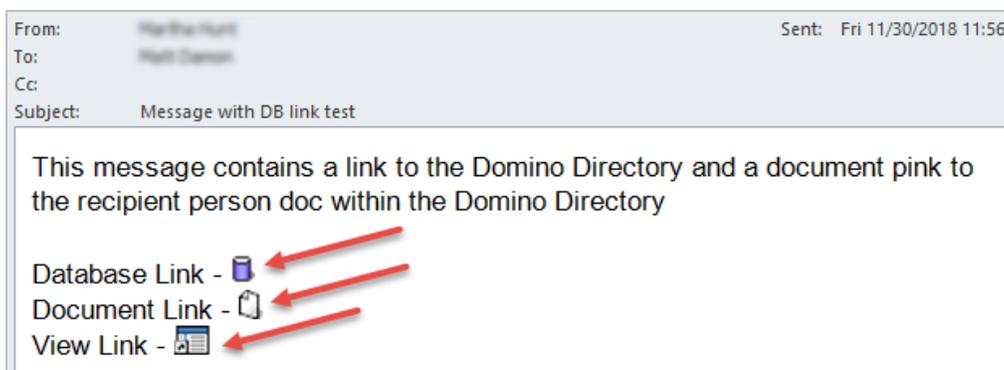
- Notes-specific email elements are fully supported and actionable in Outlook, including:
  - Embedded forms
  - Link and action hotspots, text pop-ups and buttons
- Mail flow redundancy and clustering

2.2 Functions and Advantages

Integration for Notes is designed to:

- Achieve high-fidelity exchange of mail and calendar data by utilizing the SMTP protocol with MIME and iCAL encoding of Notes Rich Text data
- Increase reliability with redundant mail flow paths for SMTP-based email data exchange
- Provide reliable free/busy schedule lookups between Exchange and Domino users
- Improve the appearance of addresses in the From, To, and CC fields, replacing unfriendly email addresses with user-friendly display names
- Identify and intercept Exchange or Domino initiated invitations that the opposing system can't support, and send customizable notifications to the meeting chairs
- Allow Outlook users to book meetings using Domino rooms or resources

Section 3: Scope

Before installing BTCal, it is important to know what specific functionality is covered in this document and what is not. For items not included in this document but covered elsewhere, references to the appropriate documentation are provided in the Out of Scope section.

3.1   In Scope

This document covers the installation of a *single Domino coexistence BTCal server*. The following topics are also covered:

Mail routing to and from Exchange

How to handle multiple SMTP domain namespaces

Configuration of the Domino and Exchange infrastructure to support coexistence

Configuration of the components in Office 365 (O365)/Exchange to support coexistence mail routing

3.2   Out of Scope

This document does *not* cover the items listed below. References to any external supporting documentation are provided.

FreeBusy - While FreeBusy is referenced throughout this document as it relates to coexistence, and is part of Integration for Notes, details and installation procedures are found in the FreeBusy user guide.

Redundancy/high availability

Installation of a hybrid system

Directory Sync Proconfiguration (while highly recommended as part of a successful coexistence setup, Directory Sync Prois a separate product.

Active Directory (AD) schema changes

Project methodology

Creation of an O365 tenant and security model

Section 4: Recommended Installer Prerequisites

4.1 Recommended Prerequisite Knowledge

This guide assumes that the Integration for Notes administrator has some familiarity with both Domino and Exchange/Office 365.

Regarding Domino, the administrator should understand:

- How email routing works between Domino servers (NRPC and SMTP)

- Domino Replication topology and how Connection docs control replication

- Using Server and Configuration docs to manage a Domino environment

- Domino server and the Notes.INI file; for example, an administrator should know that the last character in an INI file needs to be a carriage return

- Domino Directory Domain docs, particularly Foreign Domain docs

If installing ZApp (an add-on to Integration for Notes), the administrators should also understand Domino ACLs, Readers fields, and how Notes forms interact with displayed field data.

Regarding Exchange/O365, an administrator should understand:

- How SMTP routing works to and from Exchange/O365

- How to create send and receive connections using PowerShell

- The difference between authoritative and remote domains

- The difference between user types: contacts, mail enabled and mailbox enabled

Section 5: Pre-installation Requirements

Before installing BTCal, the administrator should review this section to be sure the necessary products, permissions, and checklist items have been acquired (refer to the Integration for Notes BTCal/FreeBusy Requirements documentation). Some form of directory synchronization is necessary for integration. While it's possible to manage directory synchronization manually, Binary Tree recommends its own Directory Sync Pro.

5.1   Recommended Products

Directory Sync Pro

Why is Directory Sync Prorecommended?

Before Integration for Notes BTCal can be installed, a fully populated GAL (Global Address List) must exist in either the O365 or the local Exchange environments. Without this, the full calendaring functionality of BTCal will not be available. The GAL can be populated in O365 by manually adding the information from Notes, but this is cumbersome and error-prone.

Directory Sync Pro for Notes automates the process of populating the local Active Directory and transferring mail enabled objects from Notes to Exchange/O365. All of the mail addresses will need to be in Active Directory so that they can be synced to the cloud. Directory Sync Protakes the known valid SMTP addresses in Domino and writes them to Active Directory.

| NOTE ! | You must use Azure AD Connect to populate the local Active Directory to the Azure Active Directory |

Visit https://www.binarytree.com/products/directory-sync-pro/ and refer to the "Documentation" link at the bottom of the page for more information on Directory Sync Pro.

FreeBusy

When is FreeBusy required?

FreeBusy is required for heavy users of calendaring. During coexistence, it allows users in Notes to schedule and coordinate meetings with users who have already migrated to Exchange. FreeBusy's functionality is limited to indicating whether someone is available to schedule with a meeting.

Once all Domino mail objects have fully migrated from Notes to Exchange, FreeBusy is no longer required because all scheduling can be done in Exchange.

BTCal, on the other hand, is still useful after all users have migrated to Exchange. Most clients, after migration, will still want to use BTCal because it allows them to continue using some Notes applications. BTCal assists in handling the SMTP routing for mail-related applications.

See the FreeBusy User Guide for more information.

5.2   Required Administrator Rights and Permissions

To install and configure BTCal, the administrator must have certain rights. The required *temporary* rights are listed below under their corresponding environment.

Domino – Required Rights	Description

Domino Directory access
• Editor access
    o Server Modifier role
    o Net Modifier role
	The administrator must be assigned "Editor" access with the Server Modifier and Net Modifier roles in the Domino Directory Access Control List.

Domino Server Document(s)
• Add the administrator to the following fields:
    o Administrators
    o Create databases & templates
    o Create new replicas
	The administrator must be listed under the Administrators, Create databases & templates, Create new replicas fields on the server documents where BTCal will be installed.

Notes.ini edit rights	The administrator must be able to edit the Domino Notes.ini file.

Exchange/O365 - Required Rights	Description
PowerShell rights • Issue commands	The administrator must have rights to issue PowerShell commands.
Exchange roles • Create Send and Receive Documents • Configure Accepted and Remote domain settings	The administrator must be able to create Send and Receive connectors and configure Accepted and Remote domain settings.
Office 365 roles • Exchange Administrator role	The administrator must be assigned the "Exchange Administrator" role to create Send and Receive connectors and make other O365 configurations.

Windows - Required Rights	Description
Administrator access	The administrator requires admin access to the server(s) where BTCal will be installed.

5.3   Administrator Pre-Install Checklist

Use the checklist below to gather the information necessary for successful installation of Integration for Notes BTCal.

NOTE !   To answer many of the questions below, administrators should already have the rights listed in the previous section: Required Administrator Rights and Permissions.

Directory Sync Pro(if in use)

☐   Deploy Domain name: _____

☐   Target SMTP address (domain): _____

☐   Local part of internet address, short name or the internet address:
_____ *Local part* value depends on which was deployed in
Directory Sync Pro

Domino

☐   Domino Coexistence Server Name: _____

☐   OS and Service Pack Version: _____

   Windows Server 2016 | 2012 R2 | 2008 R2

   .NET 4.0 | 4.5 and Microsoft Visual C++ v10 dependencies (the necessary C++ runtimes are in the installation package)

☐   Domino Version: _____

   Domino 8.5.3 or higher (32-bit version only)

☐   Foreign Domain: _____

   The Foreign Domain reference used to route mail for Exchange to the Domino Coexistence server, e.g. Exchange; this reference gets appended to Notes mail messages for users, e.g. Joe Smith/Acme@Exchange
   - *Recommended value: "BTEx" (for on-prem Exchange) "MSO365" (for Office365)*

☐   Foreign Domain Mail Box: _____

   The file name to be used when creating the router mail box used by the foreign domain
   - *Recommended value: "btexchange.box"*

☐   Directory for Exchange Contacts: _____

   The name of the secondary Domino Directory to be used by Directory Synchronization to sync contacts from Exchange to Domino.
   - *Recommended value: "exchangenames.nsf"*

☐   Exchange Organizational Unit: _____

   The organizational unit to be used when creating Exchange contacts in the Domino Directory, i.e. /Exchange; users will be created as Joe Smith/Exchange; this must be a unique value in the Domino environment

☐ Domino entries contain valid and unique SMTP address *(Y/N)*: _____

All Domino Directory entries intended for synchronization must have valid SMTP addresses; these must also be unique in both Domino and Exchange; any pre-existing contacts in the GAL should be removed or disclosed prior to the start of the project

Other

☐ Shared Mail Namespace(s)/SMTP Domain(s): _____

If one or more shared namespace is used for both environments, list it here, i.e. contoso.com

☐ Domino Mail Namespace/SMTP Domain: _____

Namespace to be used internally to represent the Domino mail environment, i.e. domino.contoso.com; SMTP domain from the target address AD attribute

☐ Exchange Mail Namespace/SMTP Domain: _____

Namespace to be used internally to represent the Exchange mail environment, i.e., for on-prem, exchange.contoso.com or, for O365, <tenantname>.onmicrosoft.com

☐ Active Directory Server: _____

Name (FQDN) of the Active Directory server that will be used for reading and writing information, i.e. DomainController1.contoso.com

☐ Exchange Hub Transport: _____

Name of the Exchange server (with the Hub Transport role) or Exchange server array that will be used for message routing to and from the Domino mail environment, i.e. ExchangeHub.contoso.com

☐ Exchange Hub Transport IP Address: _____

IP address of the server or array used as the Exchange Mail Gateway

For O365 IP addresses, refer to the following URL: https://docs.microsoft.com/en-us/office365/enterprise/urls-and-ip-address-ranges

Server Connectivity

☐ Bidirectional communication between Domino and the Domino Coexistence Server(s) is configured using port 1352

☐ Port 25 is open on the network between the Domino Coexistence Server(s) and the Exchange Hub Transport Server(s)

Section 6: Configure the Domino Environment

Prior to installing Integration for Notes BTCal, the Domino environment requires some configuration. The Domino environment is primarily configured through a series of documents in the Domino Directory. We suggest configuring the documents using the Notes Administrator client. For this section, keep the Notes Administrator client open and connected to the Hub server while you make the following configuration updates.

This section (Section 6) covers the Domino Directory documents that require configuration.

6.1   Configure the Server Document

> **NOTE!** You can modify the Domino Directory on any server; however, it's a best practice to make all changes on the Hub server

1. While connected to the Hub server, click the **Configuration** tab and expand **Server** in the left-hand Navigation Pane. Click on the **All Server Documents** view and then edit the coexistence **Server Configuration Document** to match the values in the bullets or tables below.

2. On the **Basics** tab make the following changes:

Field	Recommended Value
Routing Tasks	Mail Routing, SMTP Mail Routing
SMTP listener task	Enabled

3. Click the **Ports** tab then the **Internet Ports**… tab, scroll down to the **Web** section and click on the **Web** tab and make the following changes:

Field	Recommended Value
TCP/IP port number	80
TCP/IP Port Status	Enabled

4. In the **Web** section, click the **Mail** tab and modify the following:

Field	Recommended Value
**TCP/IP Port Numbers	Mail (SMTP Inbound)**	25
**TCP/IP Port Numbers	Mail (SMTP Outbound)**	25
**TCP/IP Port Status	Mail (SMTP Inbound)**	Enabled
**TCP/IP Port Status	Mail (SMTP Outbound)**	Negotiated SSL

| Web | Directory | **Mail** | DIIOP | Remote Debug Manager | Server Controller |

Mail	Mail (IMAP)	Mail (POP)	Mail (SMTP Inbound)	Mail (SMTP Outbound)
TCP/IP port number:	143	110	25	25
TCP/IP port status:	Enabled ▼	Enabled ▼	Enabled ▼	Negotiated SSL ▼
Enforce server access settings:	No ▼	No ▼	No ▼	N/A
Authentication options:				
Name & password:	Yes	Yes	No ▼	N/A
Anonymous:	N/A	N/A	Yes ▼	N/A
SSL port number:	993	995	465	465
SSL port status:	Disabled ▼	Disabled ▼	Enabled ▼	Enabled ▼
Authentication options:				
Client certificate:	No ▼	No ▼	N/A	N/A
Name & password:	Yes ▼	Yes ▼	No ▼	N/A
Anonymous:	N/A	N/A	Yes ▼	N/A

5. Save and close the **Server Document**. Replicate the Domino Directory to all servers within the environment.Pas

6.2   Domino Server Configuration Document

Next, create or modify an existing Server Configuration document to handle SMTP traffic and secure connections.

1. While connected to the Hub server, click the **Configuration** tab and expand **Server** in the left-hand Navigation Pane. Click on the **Configurations** view. If a **Server Configuration Document** does not already exist, add one; otherwise, edit the existing coexistence **Server Configuration Document** to match the values in the table below.

> **NOTE !**
> If there are more than one Domino Coex servers, create a single Configuration document and assign it to a Server only group list. This server-only group list should contain all Coex servers as members.

2. In the Server Document, to ensure SMTP is the standard protocol to and from the Domino coexistence server, select the **Router/SMTP** tab and then the **Basics** tab. The table below lists the fields that need to be modified and their recommended values:

Field	Recommended Value
Number of mailboxes	1
SMTP used when sending messages outside of the local internet domain	Enabled
SMTP allowed within the local internet domain	Disabled
Servers within the local Notes domain are reachable via SMTP over TCP/IP	Always
Address lookup	Fullname then Local Part
Exhaustive lookup	Enabled

NOTE ! Integration for Notes supports multiple mailboxes. If your environment requires more than one mailbox, modify the **Number of Mailboxes** field accordingly.

3. While on the **Router/SMTP** tab, click the **Restrictions and Controls…** tab and the **SMTP Inbound Controls** tab. Edit the **Server Configuration Document** to match the Recommended Values in the table below. Each of the three fields shown below should be populated with the IP address of either the Exchange Hub Transport server or array.

Field	Recommended Value
Allow messages only from the following internet hosts to be sent to external internet domains	*<IP Address of Exchange Hub Transport server or array>* from **Administrator Pre-Install Checklist**
Exclude these connecting hosts from anti-relay checks	*<IP Address of Exchange Hub Transport server or array>* from **Administrator Pre-Install Checklist**
Allow connections only from the following SMTP internet hostnames/IP addresses	*<IP Address of Exchange Hub Transport server or array>* from **Administrator Pre-Install Checklist**

4. Next, click the **MIME** tab, the **Conversion Options** tab and then the **General** tab. Set each field to the recommended value below:

Field	Recommended Value
Return receipts	Enabled
Return receipt mapping	Use Disposition-Notification-To
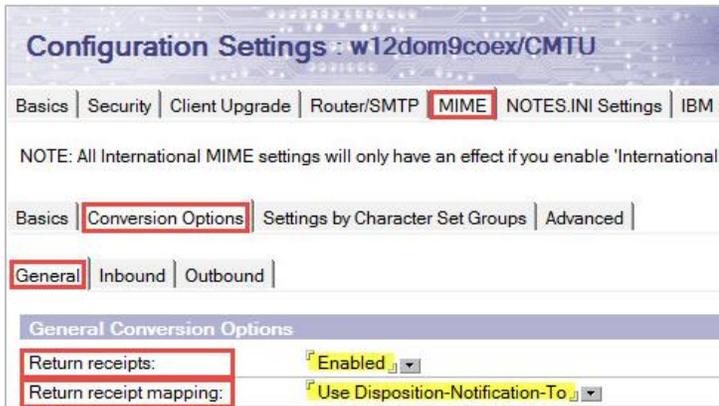
5. Finally, on the **MIME** tab, select the **Conversion Options** tab and then the **Outbound** tab. Next, navigate to the **Outbound Conversions Options** section and edit the **Server Configuration** document to match the Recommended Values in the table below.

Field	Recommended Value
Attachment encoding method	"Base64"
Message content	"From Notes to HTML"
Convert tabs to spaces	"No"
Outbound line length	"75"
Lookup Internet addresses for all Notes address when Internet address is not defined in document	"Enabled"
Perform exhaustive lookups when converting Notes address to Internet addresses	"Enabled"
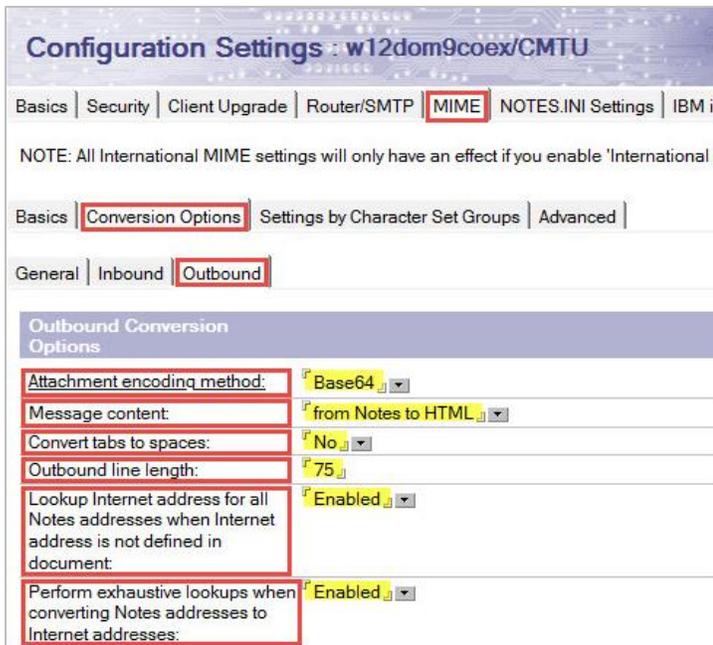
6. On the **MIME | Advanced | Advanced Outbound Message Options** tab, on the **RFC822 phrase handling** field, make sure **Use CN as phrase** is selected.
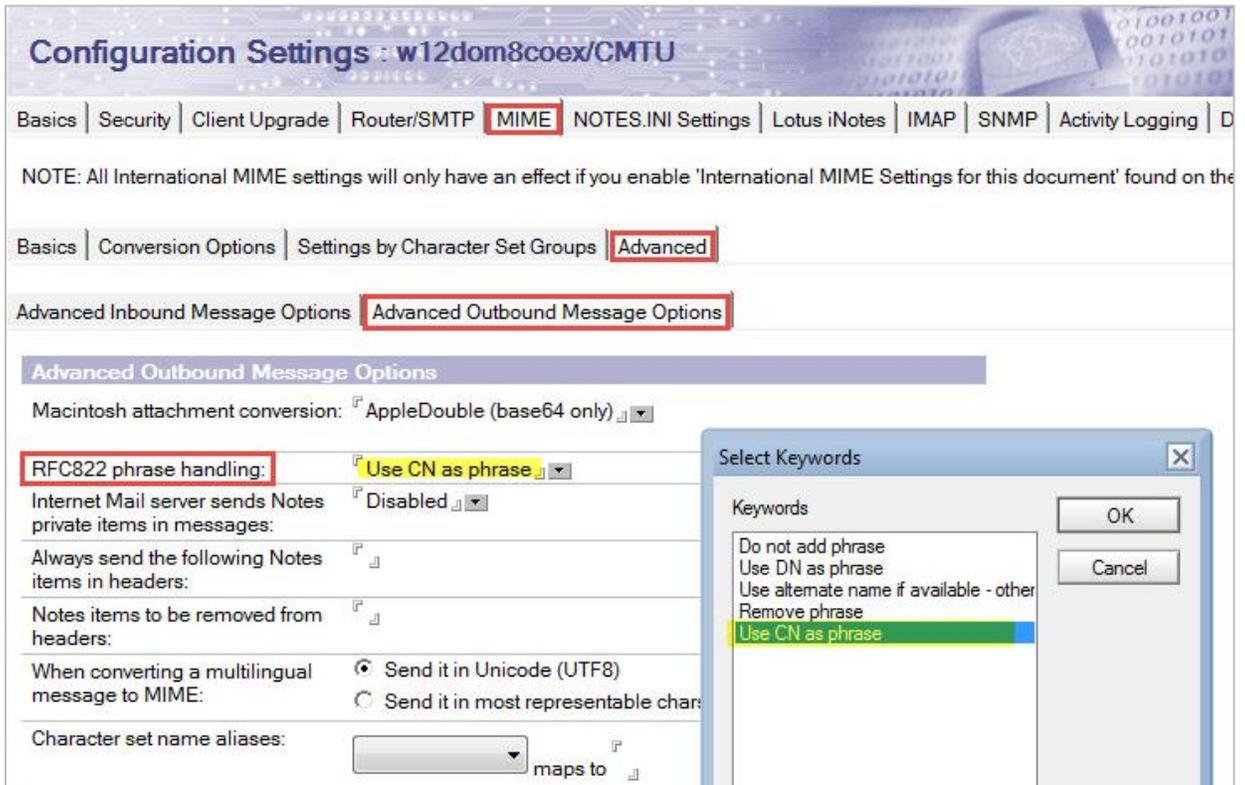
7. Click **Save & Close** to save changes to the Server Configuration document.

6.3   Global Domain Document

While still connected to the Hub server, return to the left-hand Navigation Pane, expand **Messaging** and click on the **Domains** view. Expand the **Global Domain** category.

Edit the existing Global Domain document to match the recommended values below.

Click on the **Domains** view and click the **Add Domain** button. A new document will be created. Follow the steps below.

NOTE !   The Global Domain Document should already exist. If for some reason it does not, add it with the appropriate values.

1. Select the **Conversions** tab and edit each field to match the recommended values below:

Field	Description	Recommended Value
Alternate Internet domain aliases	The value for the **Alternate Internet domain aliases** will be what you listed in the **Administrator Pre-Install Checklist** Domino Mail Namespace/SMTP Domain field, i.e. domino.<PrimarySMTPDomain.com>.	[**Domino Mail Namespace/SMTP Domain** value from **Administrator Pre-Install Checklist** separated by carriage returns]
Internet address lookup		Enabled
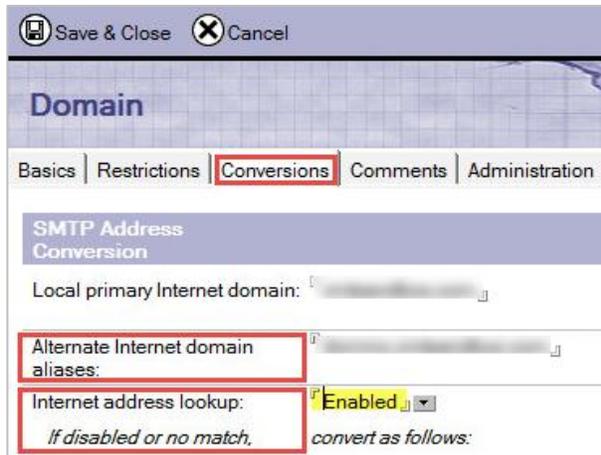
6.4   Foreign Domain Document

Create the Foreign Domain document by following the steps below:

1. While still in the **Messaging | Domains** view, click the **Add Domain** button.
2. In the document that opens, edit the fields to match the recommended values bulleted below.

3. On the **Basics** tab, make the following changes:

Field	Description	Recommended Value
Domain type		"Foreign Domain"
Foreign domain name	Use the value from the Foreign Domain line in the Administrator Pre-Install Checklist, i.e. MSO365 or BTEX	[**Foreign Domain** value from **Administrator Pre-Install Checklist**]

4. Click the **Mail Information** tab and make the following changes:

Field	Recommended Value
Gateway server name	[**Domino Coexistence Server Name** value from **Administrator Pre-Install Checklist**]
Gateway mail file name	"btexchange.box"

5. Click the **Calendar Information** tab and make the following changes:

Field	Description	Recommended Value
Calendar server name		[**Domino Coexistence Server Name** value from **Administrator Pre-Install Checklist**]

Calendar system	"btexchange.box"

6. Click **Save & Close**. This new document will need to replicate to all other servers in the Domino domain.

6.5   Foreign SMTP Domain Document

Create a Foreign SMTP domain by following the steps below:

1. While still in the **Messaging | Domains** view, click the **Add Domain** button
2. On the **Basics** tab, make the following changes:

Field	Recommended Value
Domain type	"Foreign SMTP Domain"

3. On the **Routing** tab, make the following changes:

Field	Description	Recommended Value
Internet Domain		[**Exchange Mail Namespace/SMTP Domain** value from **Administrator Pre-Install Checklist	Other**]
Domain name	This is virtual domain used later in the connection documents for mail routing purposes.	"OutboundtoExchange"

4. **Save & Close** to create the Foreign SMTP Domain.

This completes the creation of the Foreign SMTP Domain document that will be used to route SMTP mail to the connection document that will be created in the next step.

6.6 Server Connection Document

Create a Domino Connection document by following the steps below:

1. While still in the **Messaging** view, click the **Connections** view and click the **Add Connection** button.
2. On the **Basics** tab, edit the fields to match the recommended values in the table below:

Field Name	Description	Recommended Setting/Ex
Connection type		"SMTP"
Source server	Domino Coexistence server name in canonical format <" Domino Coexistence Server Name" from checklist>	[**Domino Coexistence Server Name** value from **Administrator Pre-Install Checklist**]
Destination server	Exchange Hub Server array name in canonical format that DOES NOT appear in any Domino directories	[**Exchange Hub Transport** value from **Administrator Pre-Install Checklist**]
Destination domain	The same as the Domain Name value in the Foreign SMTP Domain document	"OutboundtoExchange"
SMTP MTA relay host	To avoid making changes when the IP address of the relay host changes, it is recommended to enter the FQDN for the SMTP MTA relay host; in this case, specify the value of **Exchange Hub Transport** field in the checklist above.	[**Exchange Hub Transport** value from **Administrator Pre-Install Checklist**]

3. Next, select the **Replication/Routing** tab and edit the document to match the recommended values in the table below.

Field	Recommended Value
Replication task	Disabled
Routing task	SMTP Mail Routing
Route at once if	1 message pending

Routing cost	1

4. Select the **Schedule** tab to enable a schedule. It is recommended to specify a longer time range in the **Connect at times** field, such as 12:00 AM – 11:59 PM. If using anything other than 12:00 AM – 11:59 PM, mail transfer will be restricted to less than 24 hours/day.

In the **Schedule** tab, edit the fields to match the recommended values bulleted below.

- **Connect** = **Enabled**

- **Connect at times** = **12:00 AM – 11:59 PM each day**

- **Days of Week** = **Sun, Mon, Tue, Wed, Thu, Fri, Sat**

5. Click **Save & Close** to save the document.

6.7   Program Document

Create a new *Program Document* by following the steps below.

1. In the left-hand Navigation Pane, switch from the **Messaging** view to the **Server** view
2. Click on the **Programs** view and click the **Add Program** button.
3. In the new **Program Document** that opens, edit the fields on the **Basics** tab to match the recommended values below:

Field	Value
Program name	Compact
Command line	-B btexchange.box
Server to run on	*<Domino Coexistence Server name>*
Enabled/disabled	Enabled
Run at times	04:00AM
Repeat interval of	0
Days of week	Sun, Mon, Tue, Wed, Thu, Fri, Sat

4. Save and Close the document when complete.

NOTE !   The values for Run at times, Repeat interval of and Days of Week can be customized to meet the needs of your environment. Our example shows the Domino default values.

Section 7: Configure Integration for Notes BTCal in Exchange or Office 365

The last step before installing BTCal, involves configuring Exchange to send messages from Exchange to Domino. For detailed instructions on the necessary changes, click on or scroll to the environment that matches your own:

7.1　Office 365 (O365)

The administrator performing the configuration must have access to the following:

- o The Exchange Management Console or the Exchange Azure Management Console (depending upon the environment)

- o The customer tenant with an administrative level tenant account

> **NOTE !**　Unless otherwise specified in this document, default configuration values are used.

Perform the following steps from the O365 client tenant interface:

1. Log into the customer's O365 tenant. Go to the Exchange Administration section - https://**login**.microsoftonline.com/

2. Navigate to the Mail Flow section in the Exchange Online Administration Center (**Admin Center**)

If using PowerShell, execute the following commands to connect to O365:

PowerShell
$Cred = Get-Credential "admin@tenant.onmicrosoft.com" $Session = New-PSSession -ConfigurationName Microsoft.Exchange -ConnectionUri https://ps.outlook.com/powershell/ -Credential $Cred -Authentication Basic –AllowRedirection Import-PSSession $Session Import-Module msonline Connect-MsolService -Credential $Cred

7.1.1 Create a New Remote Domain

Create a new Remote domain to define message transfer settings between O365 and domains outside the internal Exchange organization.

NOTE! It is advised to create a new remote domain, apart from the default "*", to allow for specific mail format parameters with domino SMTP while not disturbing internet mail formatting.

Create a new *Remote Domain* with the following settings:

Field	Value
Name	domino.domain.com
Domain Name (as specified in the *pre-install reqs*)	*domino.domain.com*
	Be sure to allow internal out of office replies.
User Rich Text Format	Never

If using PowerShell to create a new Remote Domain, from the Windows PowerShell console using the Azure PowerShell Module*,* execute the following two PowerShell commands:

PowerShell
New-RemoteDomain -Name domino.btm.com -DomainName domino.btm.com Set-RemoteDomain – Identity domino.btm.com -AllowedOOFType InternalLegacy -DeliveryReportEnabled $true –IsInternal $true –TrustedMailInboundEnabled $true -TNEFEnabled $false

7.1.2 Create a New Accepted Domain

If you are using the tenant.onmicrosoft.com domain for routing Domino to O365 mail, skip to the next step.

Accepted domains are the SMTP name spaces (also known as address spaces) configured in an O365 organization to receive email messages.

To create a new Accepted domain, follow these steps:

1. Log into the Windows Coexistence Server and open the **Office 365 Admin Center**

2. In the **Office 365 Admin Center**, in the left pane, click **Organization Configuration/Hub Transport**, and then click the **Accepted Domains** tab

3. If the exch.contoso.com domain does not exist, in the right pane, click the **New Accepted Domain** option

4. If it does not exist, specify the following details in the new window:

   - In the **Name** field, enter the **other** domain name and add a comment that represents Domino Users; for example, *Exchange Sub-Domain (Inbound from Domino)*

   - **Accepted Domain:** Specify the domain name. For example: exch.contoso.com

   The new accepted domain should now appear for incoming traffic from Domino that will be

delivered to the new Exchange users. This accepted domain was set up to be authoritative for the domain. This domain will accept email addressed to the exch.contoso.com domain and deliver to Exchange users with a matching Proxy Address.

If using PowerShell to create a new Accepted Domain, from the Windows PowerShell console using the Azure PowerShell Module, execute the Powershell commands shown below; click **New** when complete.

PowerShell
New-AcceptedDomain -DomainName exch.<CustomerSMTPDomain> -DomainType Authoritative -Name exch.<CustomerSMTPDomain>

7.1.3   Create a Send Connector

Create and configure a send connector from Exchange to Domino. This connector defines the path to route the Domino mail from O365 for AD objects where the user's mailbox is still in Domino.

> **NOTE !** This is one area in the coexistence process that can vary from customer to customer depending on what other type of routing they will be doing from O365, such as to internet or to other domains.

1. Open the O365 **Admin Center**

2. Navigate to the **Send Connectors**, and then select **New Send Connector**

3. Configure the new Send Connector with the following settings:

Field	Value
From	Office 365
To	*<Your organization's mail server>*
Name	"ToDomino"
What do you want to do after the connector is saved?	☑ Turn On ☑ Retain Internal Exchange Email Headers
When do you want to use this connector?	*Only when email messages are sent to these domains*
Click the plus sign (+) and add the Remote Domain Names (e.g. <Domino.domain.com>)	
How do you want to route email messages?	*<Enter the IP or DNS as defined in the* <u>*Administrator Pre-Install Checklist*</u>*>*
How should Office 365 connect to your server(s)?	☐ *Be sure that* **Always Use TLS** *is unchecked.*
Validate Connector	*Enter a valid Domino SMTP address*
Save and Close	

Now that the SMTP Send Connector has been successfully created, O365 can connect to the Domino Coexistence server for contacts in O365 that don't have a mailbox. Keep in mind that a mail-enabled object or mail-enabled contact with a target address of domino.domain.com will be required to route mail.

7.1.4 Create a Receive Connector

Create and configure the Receive Connector in the **Office 365 Admin Center**. A Receive Connector must be configured to allow messages from Domino to enter the Exchange Server 2007 environment.

1. Start the **Office 365 Admin Center** for Domino from the **Start** menu as illustrated below

2. Select **Hub Transport** from **Server Configuration** in the left pane, and then click **New Receive Connector**

3. Similar to the Send Connector configuration, configure these two items as follows:

   o In the **Name** field, enter hub server name and add a comment that this is a connection to Domino users; for example: *Receive from Domino*

   o Leave the **Intended use** field as **Custom**

4. Accept the defaults. This will allow O365 to listen on all IP addresses assigned to it

5. Specify the IP address of the Domino Coexistence Server, but first delete the range and add the address

   Be sure to check the IP address of the Domino Coexistence Server before specifying it.

6. Click **Next** to receive a summary of your receive connector setup

7. Click **Next** again

8. Click **New** to create the connector

9. Click **Finish**

10. The next step will be to configure the security and permissions for using this connector; right-click on the **Receive from Domino** connector that was just created and select **Properties**

11. Select the **Authentication** tab. Deselect **Transport Layer Security (TLS)** and select **Externally Secured**

12. Select the **Permission Groups** tab and select the following permission groups. These will be set for Domino connections

13. Select **Apply**

14. Click **OK** to save the receive connector security settings. This will complete the connector setup

If using PowerShell to create a new Receive Connector, from the **Windows PowerShell** console, execute the following Powershell commands:

PowerShell
New-ReceiveConnector -Name 'Inbound from Domino' -Usage Custom -Bindings 0.0.0.0:25 -RemoteIPRanges <IP Address of Domino COEX servers (i.e. 10.1.1.1,10.1.1.2)> -PermissionGroups AnonymousUsers,ExchangeServers,ExchangeLegacyServers,Partners -AuthMechanism ExternalAuthoritative -LiveCredentialEnabled $False

This concludes all the settings required for routing SMTP mail to and from the O365 environment with the Domino Coexistence server. If an on-premises Exchange server is not being configured, skip to the License Key section.

7.2   On-Premises Exchange

This section will cover namespace design, shared namespace, and configuring SMTP connectors in Exchange. Depending on the namespace or address book design you use, SMTP connectivity is configured differently, and has slightly different prerequisites. This section will focus strictly on Binary Tree's best practices and most common scenarios for clients. In the real world, there may be slight differences to this configuration.

The following assumptions have been made about and applied to configuring BTCal in on-premises Exchange:

- The person performing the configuration has access to the Exchange admin center and Exchange Management Shell

- The account used to perform the configuration is a member of the Organization Management role group

- Unless specifically described in this document, any default configuration values will be used

7.2.1 Create a New Remote Domain

Create a new Remote domain to define message transfer settings between Exchange and domains outside the internal Exchange organization.

| NOTE ! | It is advised to create a new remote domain, apart from the default "*", to allow for specific mail format parameters with domino SMTP while not disturbing internet mail formatting. |

A new Remote Domain can only be added via PowerShell. Within the Exchange admin center, there is no option to add a new Remote Domain.

From the Exchange Management Shell console, execute the following two PowerShell commands:

PowerShell
New-RemoteDomain -Name domino.<CustomerSMTPDomain> -DomainName domino.<CustomerSMTPDomain>
Set-RemoteDomain –Identity domino.<CustomerSMTPDomain>) -AllowedOOFType InternalLegacy -DeliveryReportEnabled $true –IsInternal $true
–TrustedMailInboundEnabled $true -TrustMailOutboundEnabled $true
-TNEFEnabled $false

7.2.2 Create a New Accepted Domain

Accepted domains are the SMTP name spaces (also known as address spaces) configured in an Exchange organization to receive email messages.

To create a new Accepted domain, follow these steps:

1. Log into the Windows Coexistence Server, open Internet Explorer and navigate to the Exchange admin center

2. On the left-hand side of the **Exchange admin center**, click **mail flow** in the Navigation Pane

3. Click **accepted domains**
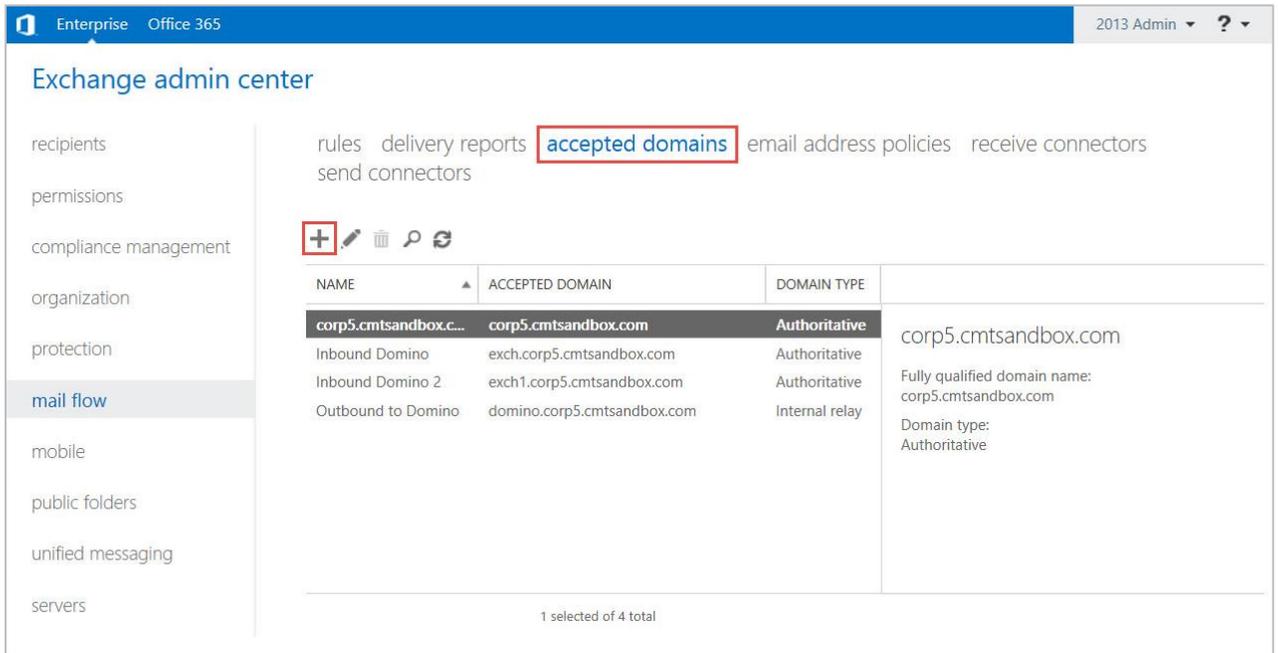
4. If the exch.contoso.com domain does not exist, the plus sign icon to add a new Accepted domain

5. In the **Accepted Domain – Internet Explorer** window that opens, fill out the form as follows:

Field Name	Description	Recommended Value
Name	Enter the other domain name here, with a comment that this represents Domino Users	Ex: *"Exchange Sub-Domain (Inbound from Domino)"*
Accepted Domain	Specify the domain name	Ex: *"exch.contoso.com"*
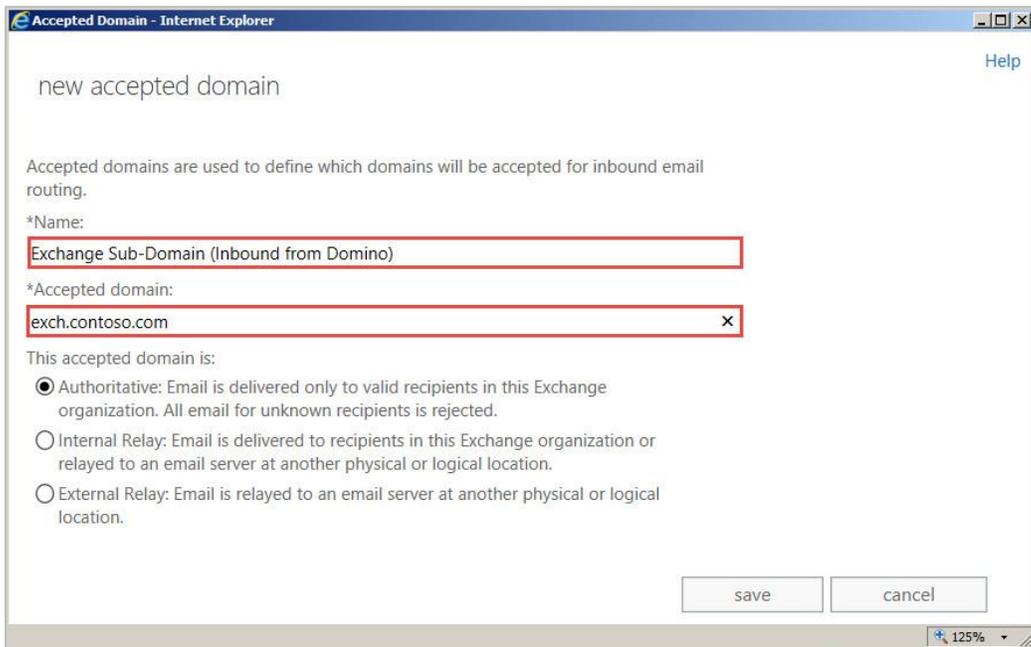
6. Click the **Save** button

The new accepted domain should now appear for incoming traffic from Domino that will be delivered to the new Exchange users. This accepted domain was set up to be authoritative for the domain. This domain will accept email addressed to the exch.contoso.com domain and deliver to Exchange users with a matching Proxy Address.

If using PowerShell to create a new Accepted Domain, from the Exchange Management Shell console, execute the Powershell commands shown below. Click **New** when complete.

PowerShell
New-AcceptedDomain -DomainName exchange.\<CustomerSMTPDomain\> -DomainType Authoritative -Name exchange.\<CustomerSMTPDomain\>

7.2.3 Email Address Policy

If using the Shared/Sub-domain namespace design, mailboxes in Exchange Server need to have an email address added in the **Exchange** domain. Rather than manually updating each user, an Email Address Policy can be created to perform this task.

1. Click **email address policies**

2. Click the plus sign to add a new email address policy

3. In the **Email Address Policy – Internet Explorer** window that opens, fill out the form as follows:

   NOTE !   If you've already implemented Directory Sync Pro for Notes, you can skip this step.

4. In the **Policy name** textbox, enter a name for the policy that is easy to recognize, e.g. *"Exchange Users"*

5. Under the **Email address format** heading, click the plus sign (+)
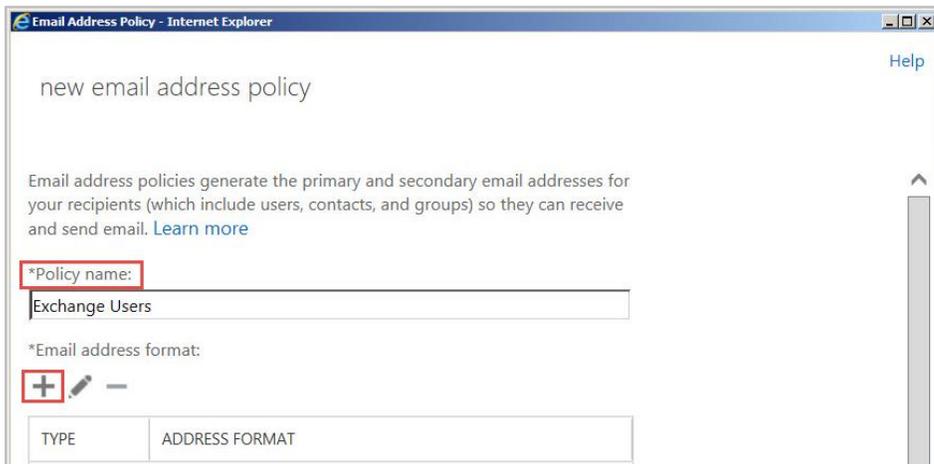
6. In the **Email Address Format – Webpage Dialog** window that opens, enter the recommended values as follows:

   a. Select the **Select an accepted domain** radio button and choose the Accepted Domain that was created in the steps above; you do not need to specify a custom domain name for the email address

   b. Select the **alias@contoso.com** radio button from the list of email address formats

   c. Click the **Save** button
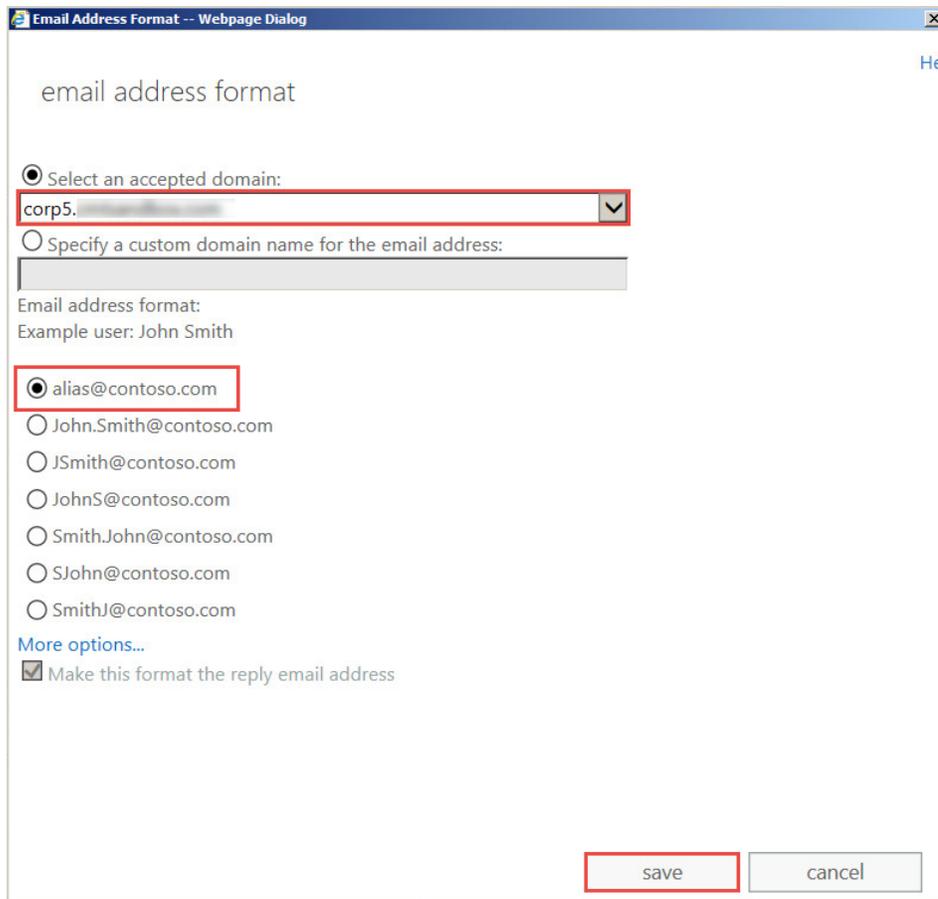
7. You will then be returned to the **Email Address Policy – Internet Explorer** window

8. Under the **Run this policy in this sequence with other policies** field, select **2** from the drop-down menu

9. Next, under the **Specify the types of recipients this email address policy will apply to** field, select the **Only the following recipient types** radio button and check the following boxes:

*Specify the types of recipients this email address policy will apply to.

○ All recipient types

◉ Only the following recipient types:

☑ Users with Exchange mailboxes

☐ Mail users with external email addresses

☑ Resource mailboxes

☐ Mail contacts with external email addresses

☑ Mail-enabled groups

10. There is no need to click the **add a rule** button; leave as is

11. Click **save**
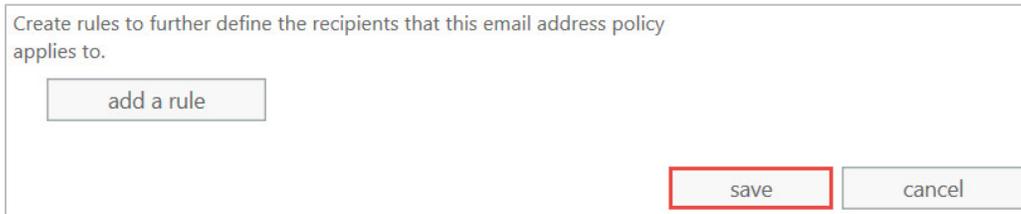
Create rules to further define the recipients that this email address policy applies to.

add a rule

save   cancel

After applying immediately, a summary of the address policies to be created will be displayed. A green check mark displays when completed successfully.

The default address policies that will get stamped on each Exchange user as they are provisioned have successfully been created. The default address policies will ensure that proper namespace and aliases are created in Exchange for mail routing purposes.

If using PowerShell, execute the following commands to create a new email address policy:

PowerShell
New-EmailAddressPolicy -Name "Exchange Users" -IncludedRecipients MailboxUsers,Resources,MailGroups -EnabledEmailAddressTemplates "smtp:%m@exch.btm.com","smtp:%m@exch.btm-lab.com","SMTP:%m@btm.com" Update-EmailAddressPolicy -Identity "Exchange Users"

7.2.4 Create a Send Connector

Create and configure a send connector from Exchange to Domino. This connector defines the path to route mail that Exchange does not a have a mailbox for, which will be your Domino contacts.

> **NOTE !** This is one area in the coexistence process that can vary from customer to customer depending on what other type of routing they will be doing from Exchange, such as to internet or to other domains.

1. Click **send connectors**

2. Click the plus sign (+) to add a new send connector

3. In the **Send Connector – Internet Explorer** window that opens, fill out the form as follows:

   a. In the **Name** field, enter the "other" Domain name with a comment that represents a connection to Domino users (e.g. "Outbound to Domino")

   b. In the **Type** field, click the **Custom** radio button

4. Click **next**
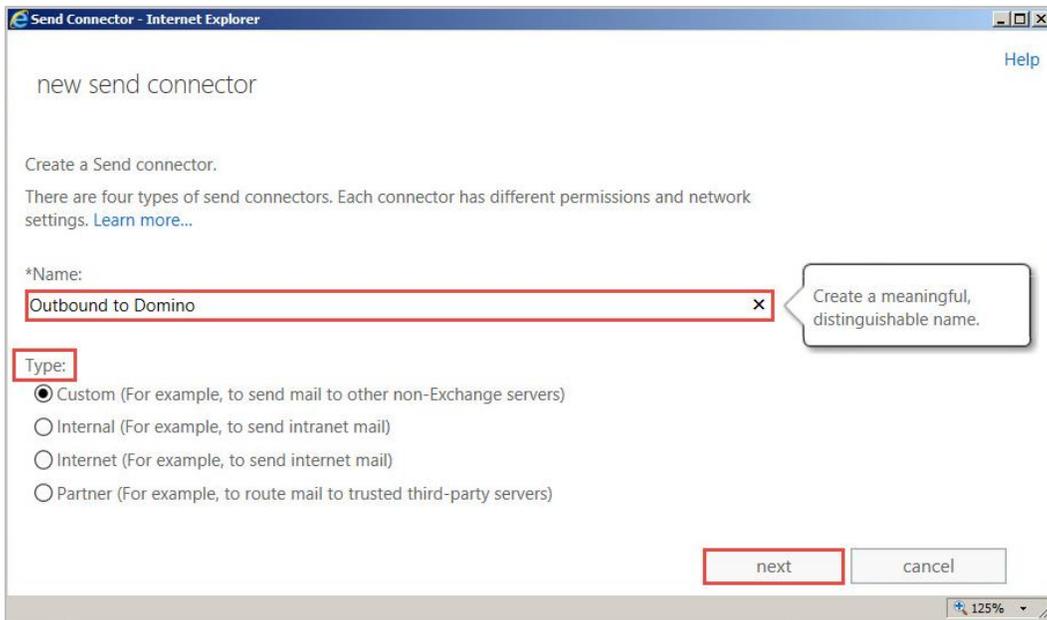
5. Fill out the next form as follows:

    a. Under **Network Settings**, select the **Route mail through smart hosts** radio button

    b. Click the plus sign (+) to add a Smart Host

    c. In the **Network Settings – Webpage Dialog** box that appears, type the fully qualified domain name (FQDN) or IPv4 address (e.g. "myhost.constoso.com" or "192.168.3.2")

    d. Click **save**

    e. Leave the **Use the external DNS lookup settings on servers with transport roles** checkbox *unchecked*

    f. Click **next**
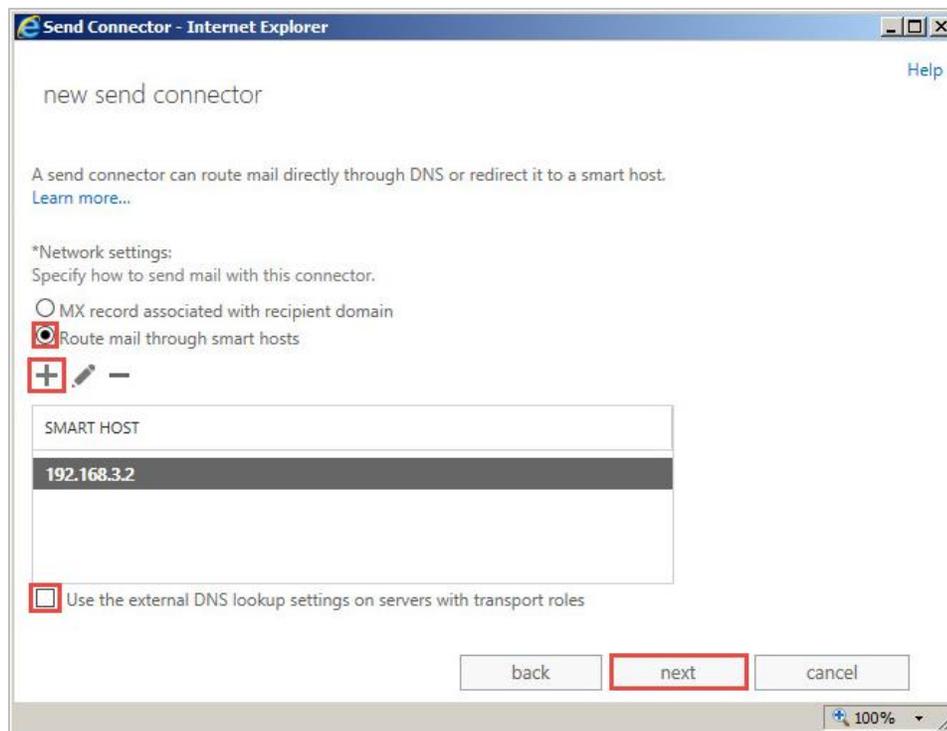
6. Fill out the **Configure smart host authentication** form as follows:

   a. Under **Smart host authentication**, be sure that the **None** radio button is selected

   b. Click **next**
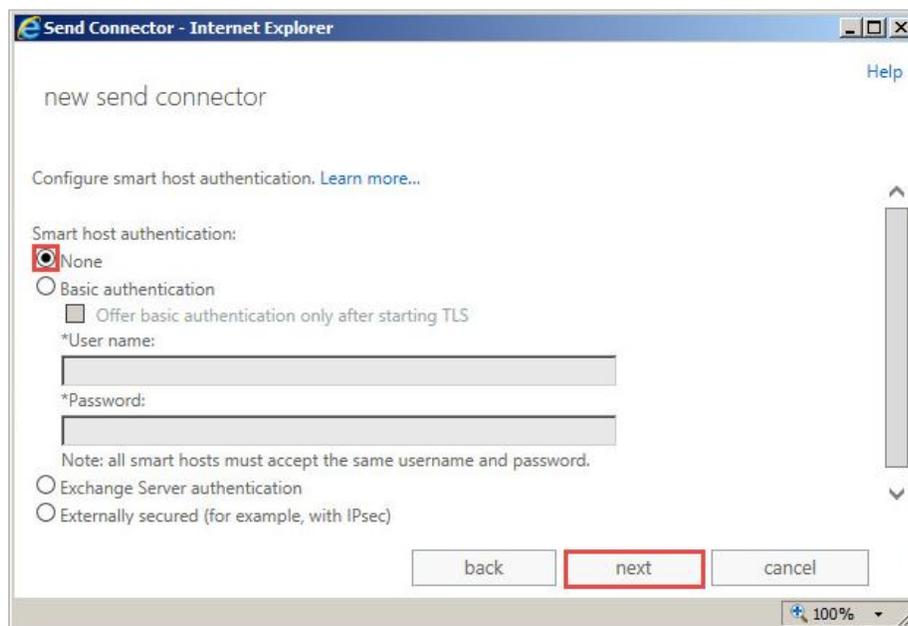
7. On the following screen, under **Address Space**, click the plus sign (+) and fill out the form as follows:

a. In the **Type** field, enter **SMTP**

b. In the **Full Qualified Domain name (FQDN)** field, enter the remote domain that you created earlier

c. In the **Cost** field, enter **1**

d. Click **save**

8. Leave **Scoped send connector** unchecked

9. Click **next**
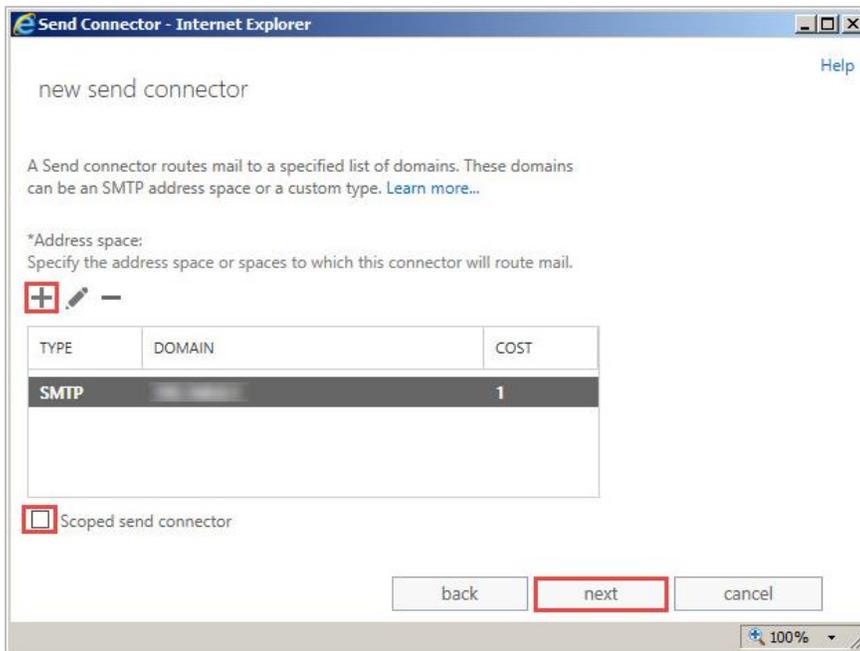
10. On the **A send connector sends mail from a list of servers…** screen, fill out the form as follows:

    a. Under **Source** Server click the plus sign (+) and fill out the form as follows:

    b. In the **Select a Server – Internet Window**, select the option with the Hub Transport role.

    c. Click the **add ->** button

    d. Click **ok**
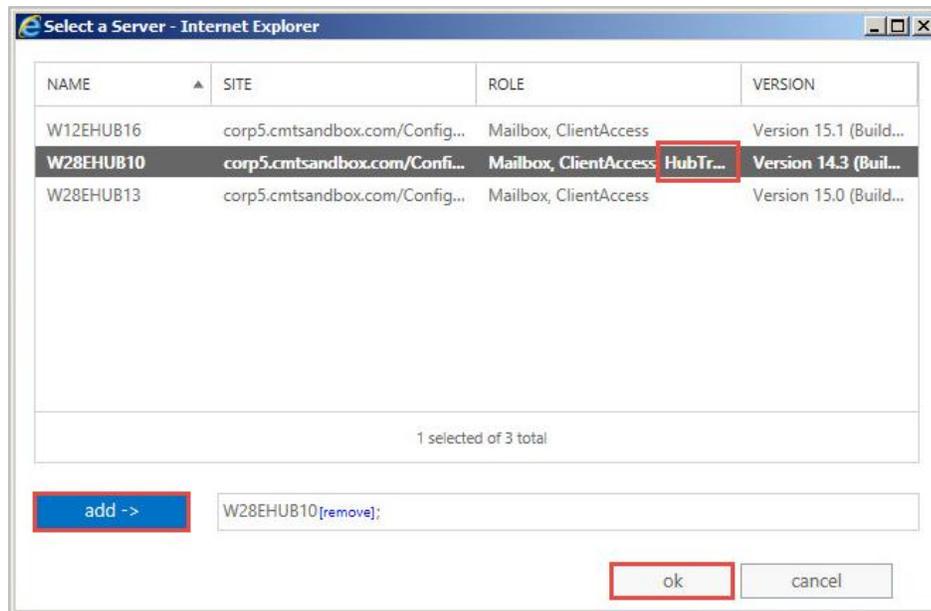
11. Click **Finish**
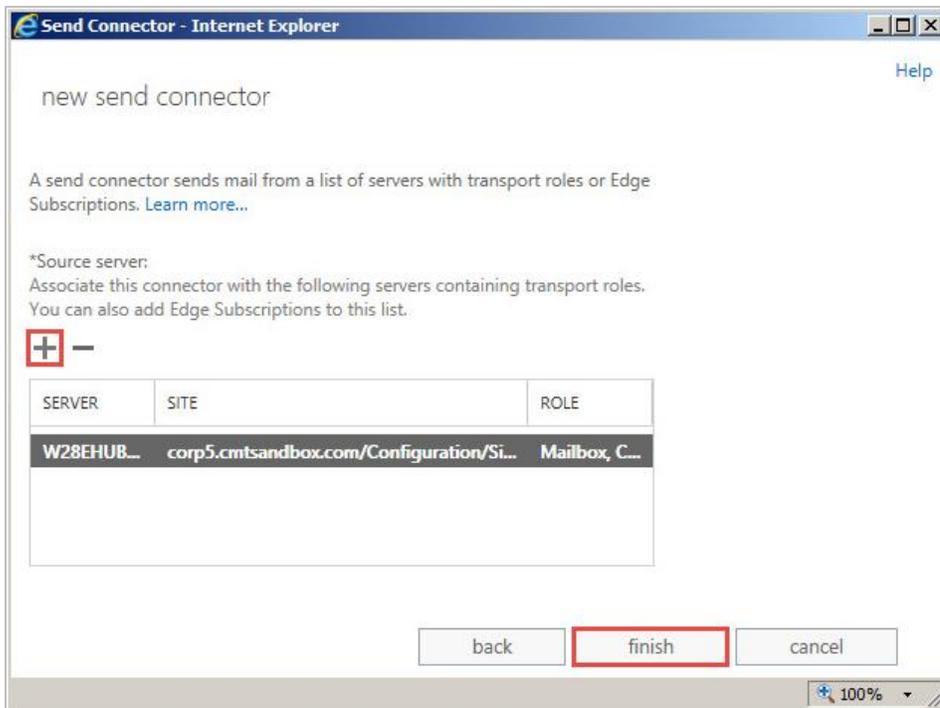
Now that the SMTP Send Connector has successfully been created, the Exchange server can connect to the Domino coexistence server and deliver SMTP mail to Domino users.

If using PowerShell to create a new Send Connector, from the Exchange Management Shell console, execute the following Powershell commands:

PowerShell
New-SendConnector -Name 'Outbound to Domino' -Usage 'Custom' -AddressSpaces domino.<CustomerSMTPDomain>,domino.<CustomerSMTPDomain> -IsScopedConnector $false -DNSRoutingEnabled $false -SmartHosts <IP Address of Domino COEX servers (i.e. 10.1.1.1,10.1.1.2)> -SourceTransportServers BTM-Exch2016

7.2.5 Create a Receive Connector

Create and configure the Receive Connector in the Exchange Management Console. A Receive Connector must be configured to allow messages from Domino to enter the Exchange Server 2007 environment.

1. Click **receive connectors**

2. In the **Select server** field dropdown menu, select your Hub Transport server

3. Click the plus sign (+) to add a new receive connector
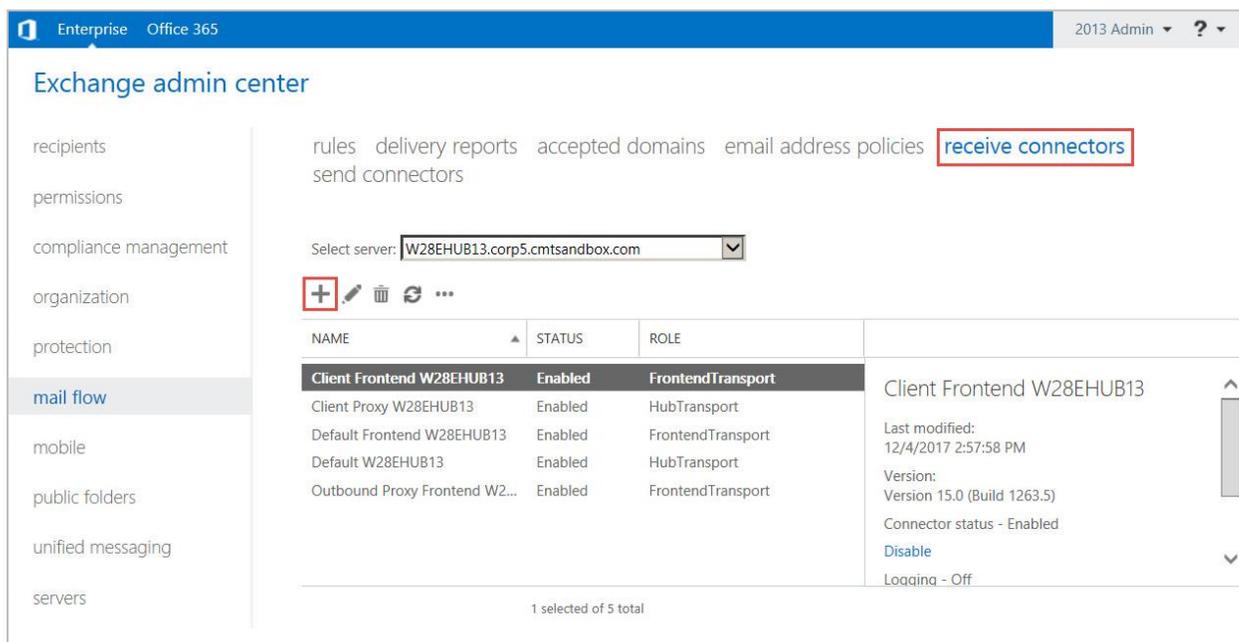
4. In the **This wizard will create a Receive connector** window, fill out the form as follows:

   a. In the **Name** field, enter a name with a comment that represents a connection to Domino users (e.g. "Inbound from Domino")

   b. The **Server** field will auto-populate; leave as is

   c. Under **Role**, click the **Hub Transport** radio button

   d. Under **Type**, click the **Custom** radio button

   e. Click **next**
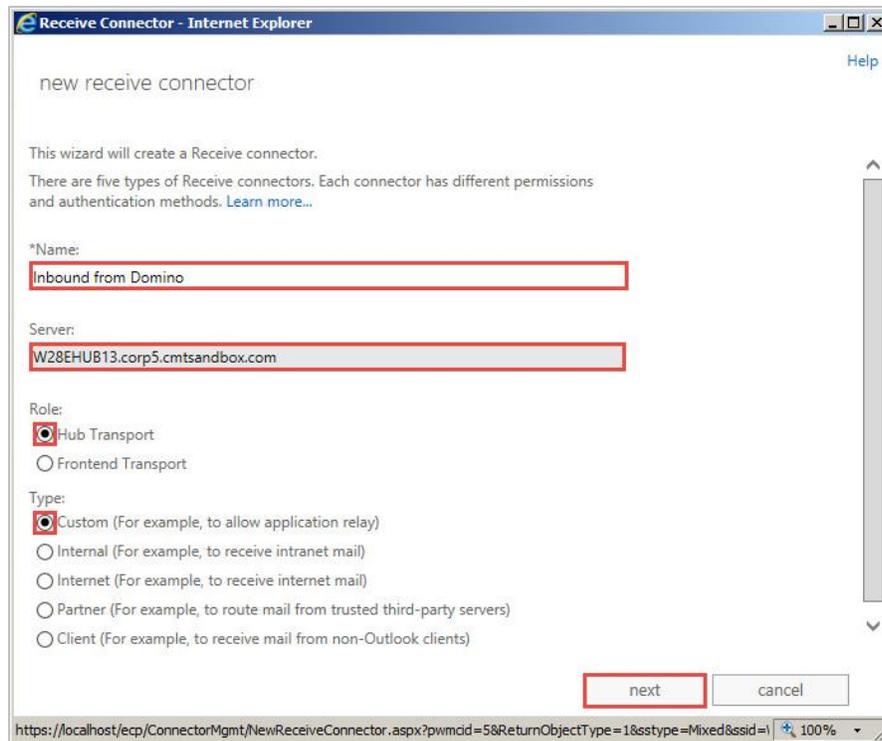
5. Under **Network adapter bindings**, click the plus sign (+) and fill out the form as follows:

    a. Under **Address**, click the **All available IPv4 addresses** radio button

    b. Under **Port**, enter **25** in the text box

    c. Click **save**
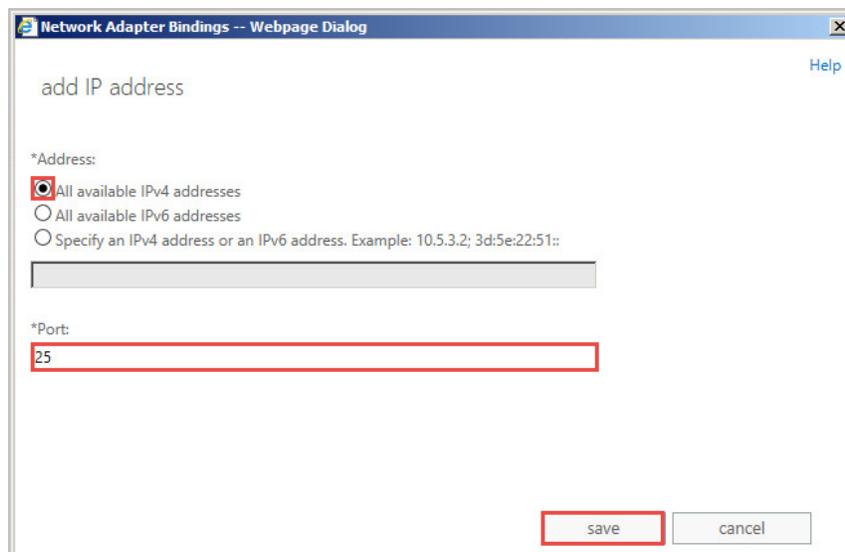
6. Click **next**
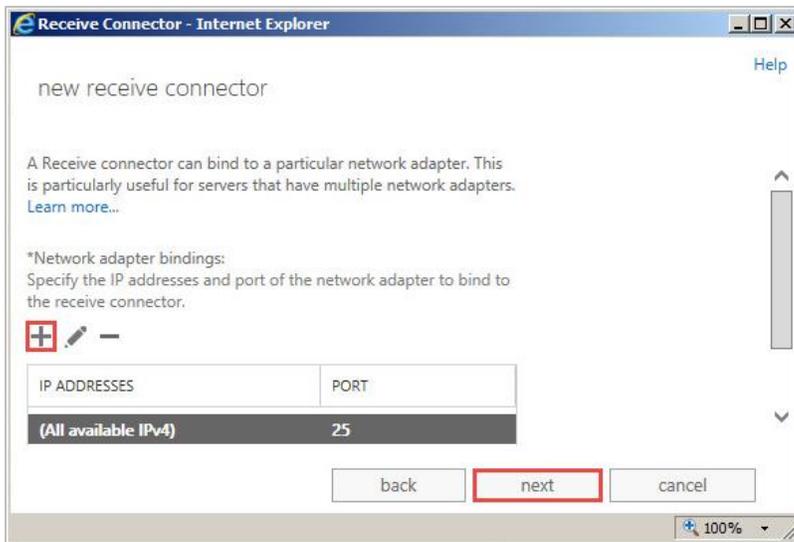
7. In the **A receive connector can accept mail…** window, under **Remote network** settings, click the plus sign (+)

    a. In the **Remote Address Settings – Webpage Dialog** window, you have the option to add a Domino Coexistence Server IP address, otherwise just click save

    b. Click **save**
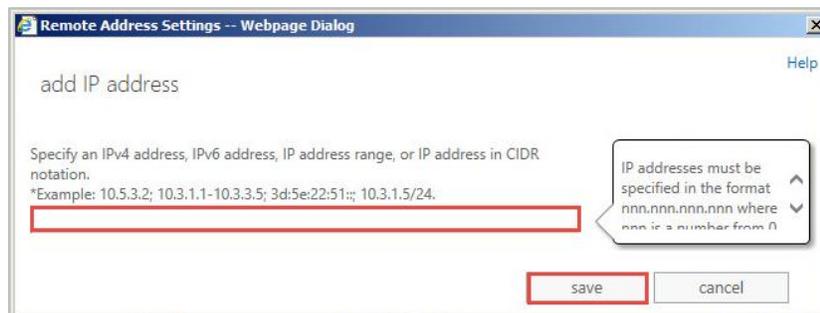
8. Click **finish**
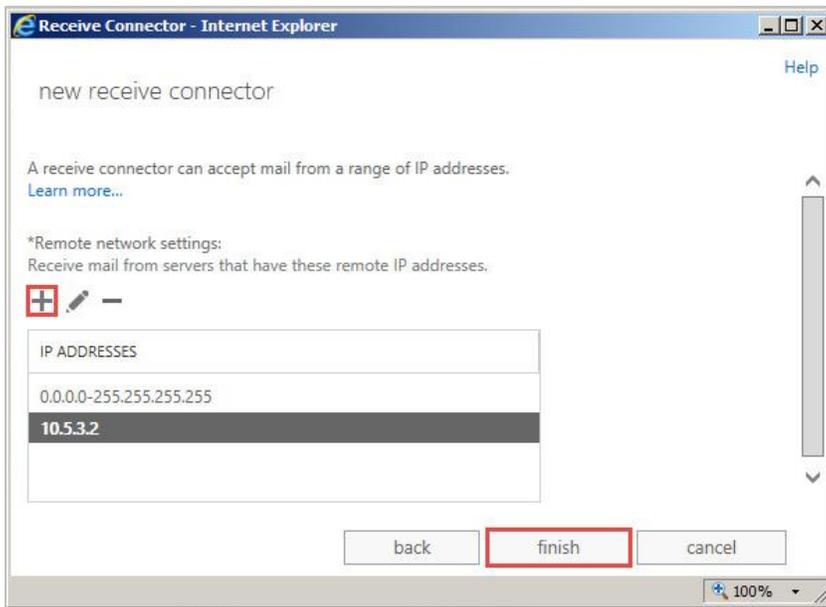
9. Once the receive connector has been created, reopen/edit it by selecting the receive connector and clicking the edit ✎ icon. In the window that appears, do the following:

   a. Click **security**

   b. Make sure **External secured (for example, with IPsec)** _is_ checked

   c. Under **Permission groups,** check:

      ☑ Exchange servers

      ☑ Legacy Exchange servers

      ☑ Partners

      ☑ Anonymous users

10. Click **save**
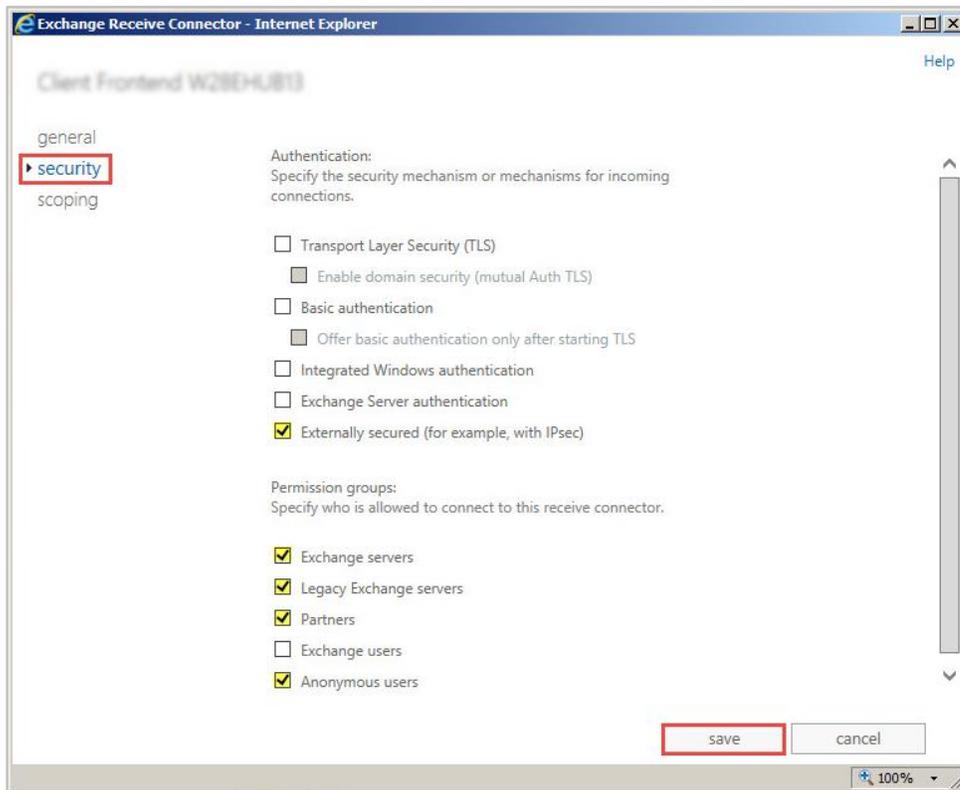
This concludes all the settings required for routing SMTP mail to and from the Exchange server environment to the Domino Coexistence server. The next step is to set up the Domino SMTP settings.

If using PowerShell to create a new Receive Connector, from the Exchange Management Shell console, execute the following Powershell commands:

PowerShell
New-ReceiveConnector -Name 'Inbound from Domino' -Usage Custom -Bindings 0.0.0.0:25 -RemoteIPRanges <IP Address of Domino COEX servers>(ie 10.1.1.1,10.1.1.2) -PermissionGroups AnonymousUsers,ExchangeServers,ExchangeLegacyServers,Partners -AuthMechanism ExternalAuthoritative -LiveCredentialEnabled $False

Section 8: Licenses

Three types of licenses for BTCal are offered: a fully functional, but expiring, trial license; a full standard license; a standard license with ZApp support. When a trial license expires, the product shuts down and stops working. A standard license (with or without ZApp), however, includes software assurance which allows you to upgrade to any versions of BTCal that become available while the license is valid. When the license expires, BTCal will continue working, but you will need to purchase a new license to upgrade to any new versions.

To apply a license:

1. Copy the license file to the Domino server.

2. Use the following command on the Domino console:

   - tell btcal install license <full path to license file>

NOTE !   BTCal should be installed and configured with the BTPROCESSDOMAIN Notes.ini value prior to applying a license.

Additional details about each license type can be found below:

- **A trial license** – Expires in 30 days; when a trial license expires, BTCal will shut down and no longer function

- **A regular/standard license** – Expires after a set time after license creation; license "timer" starts on the date the license is generated rather than the purchased date;

- **A regular license which includes support for ZApp** – Expires after a set time after generation (set by Quest). When a regular license expires, BTCal will continue to operate normally, and ZApp (if licensed) will remain enabled.

If a license will expire, license expiration warnings will be shown on the Domino console and will be emailed to the BTCal administrator (configured during BTCal installation) at the following intervals: 90/30/3/2/1 days left before expiration.

Section 9: Installing Integration for Notes

To install Integration for Notes, perform the following two installations:

1. **Notes Integration.exe** installation package for BTCal and ZApp to be installed on the Domino Coexistence server
2. **Notes Integration FreeBusy.exe** installation package for BTFree/Busy to be installed on the Domino Coexistence server and Windows Coexistence server *(see FreeBusy user guide)*

Please refer to the Directory Sync Pro Installation Guide if you will be installing Directory Sync Pro.

9.1   Downloading Instructions

[SV(1)][ET(2)][S(3)][ET(4)]The Install Kit can be downloaded at support.quest.com.

9.2   Install Integration for Notes BTCal on Domino

Follow the steps below to install the Domino Coexistence server (see the Administrator Pre-Install Checklist section for a list of prerequisite technical information to obtain prior to installing BTCal): Confirm the server meets the hardware requirements and prerequisites have been installed outlined in the Administrator Pre-Install Checklist.

The BTCal components are installed separately from the Free/Busy components (see the Free/Busy User Guide for more information).

NOTE! Don't forget to back up your notes.ini file before installing new software on your Domino server!

1. Stop the Domino server by issuing the "quit" command at the console.

2. Run the **Notes Integration.exe** as Administrator

3. On the installation wizard screen, click **Next**
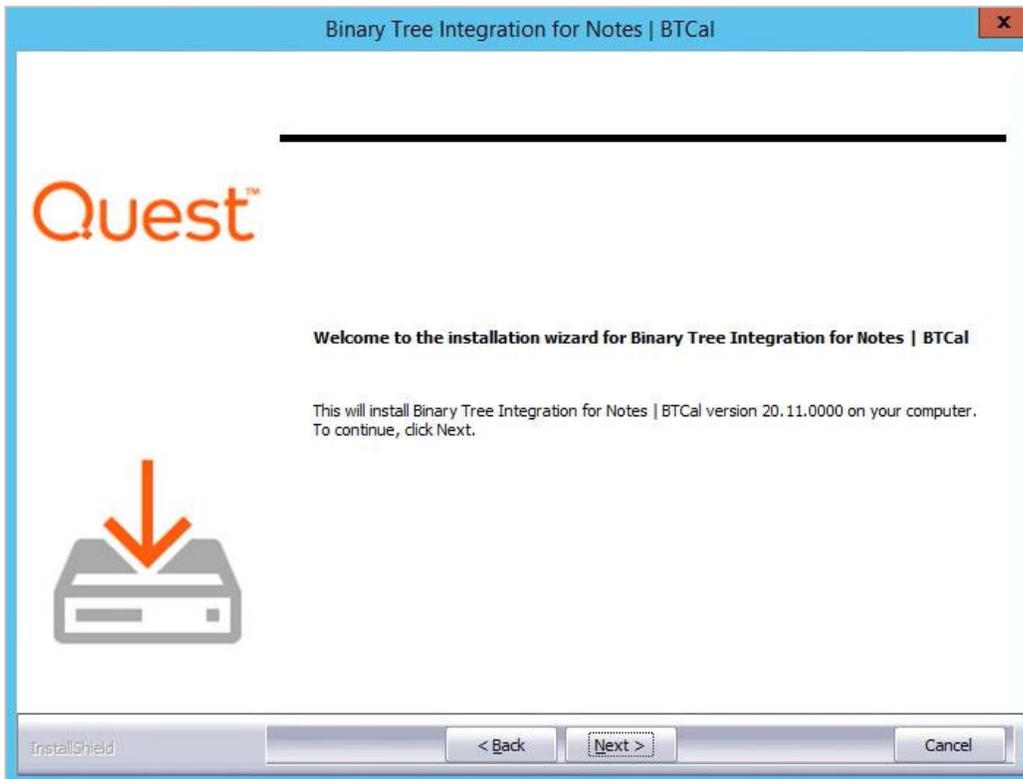
4. Review the Software License Agreement and then click **Yes**
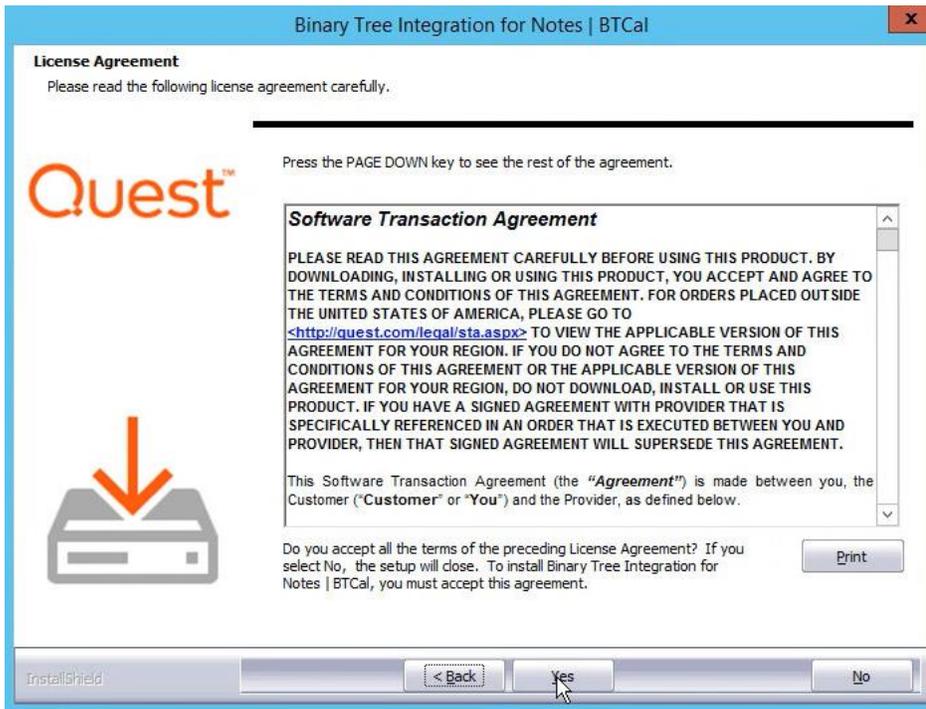
5. On the **Verify Domino Instance Data Directory Path** screen, browse to the location of the Notes.ini file that will be modified for the Domino instance; click **Next**:
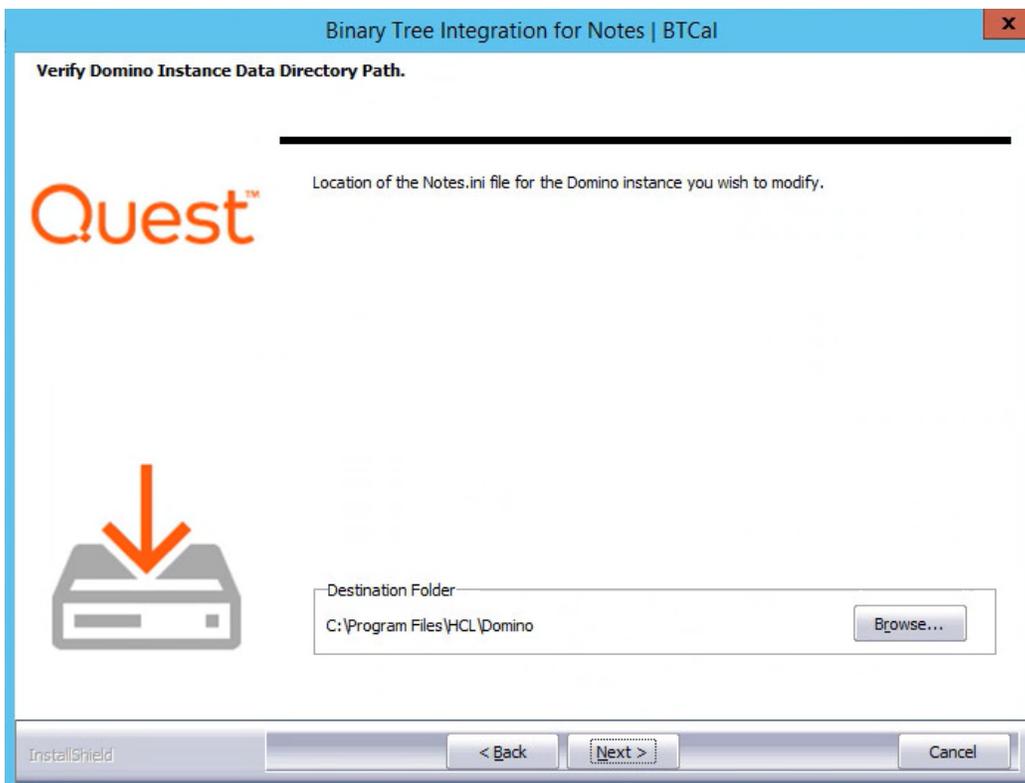
6. On the **Confirm Domino Directories** screen, confirm the displayed directories contain the **Domino Program Directory** and the **Domino Data Directory** where Integration for Notes BTCal will be installed; click **Next**:
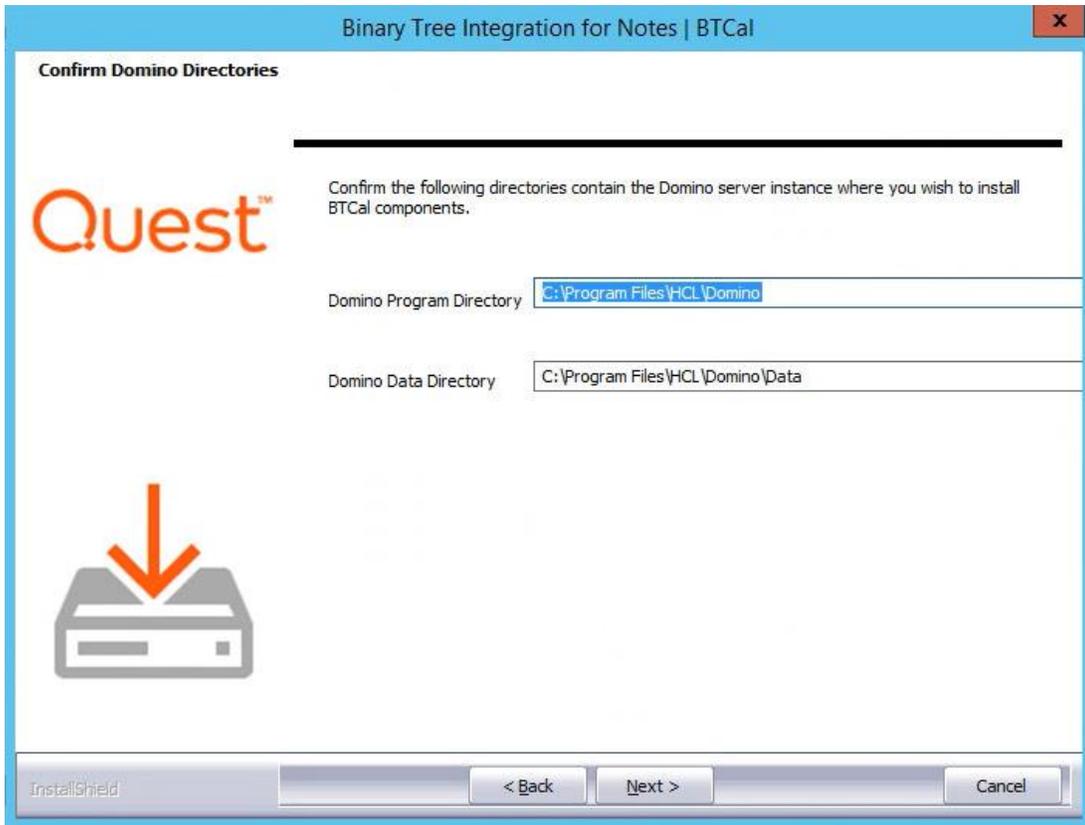
7. On the **Ready to Install the Program** screen, click **Install** to begin the installation:
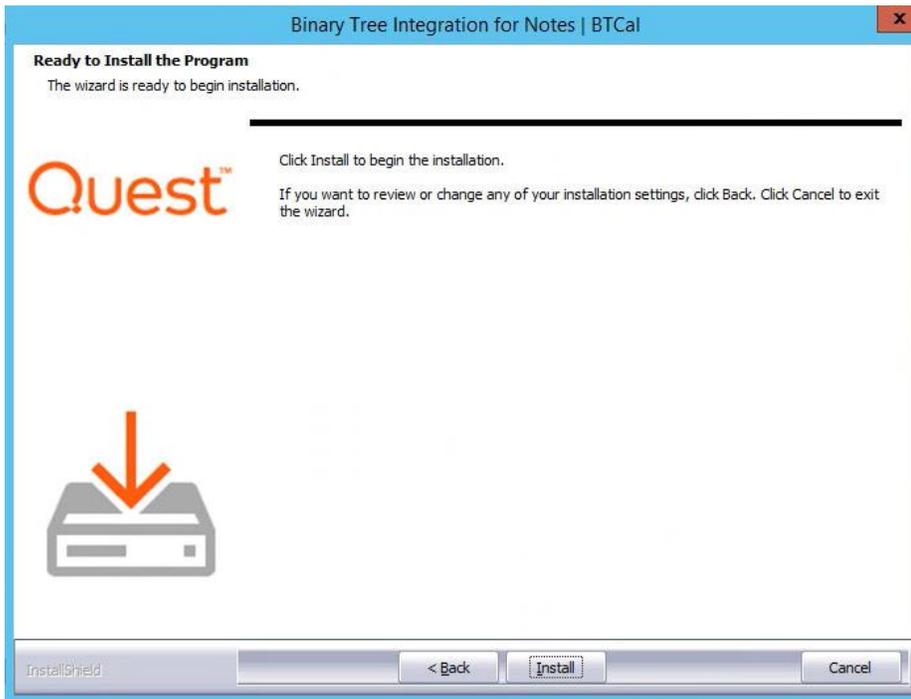
8. The progress of the installation will be displayed on the **Setup Status** screen:
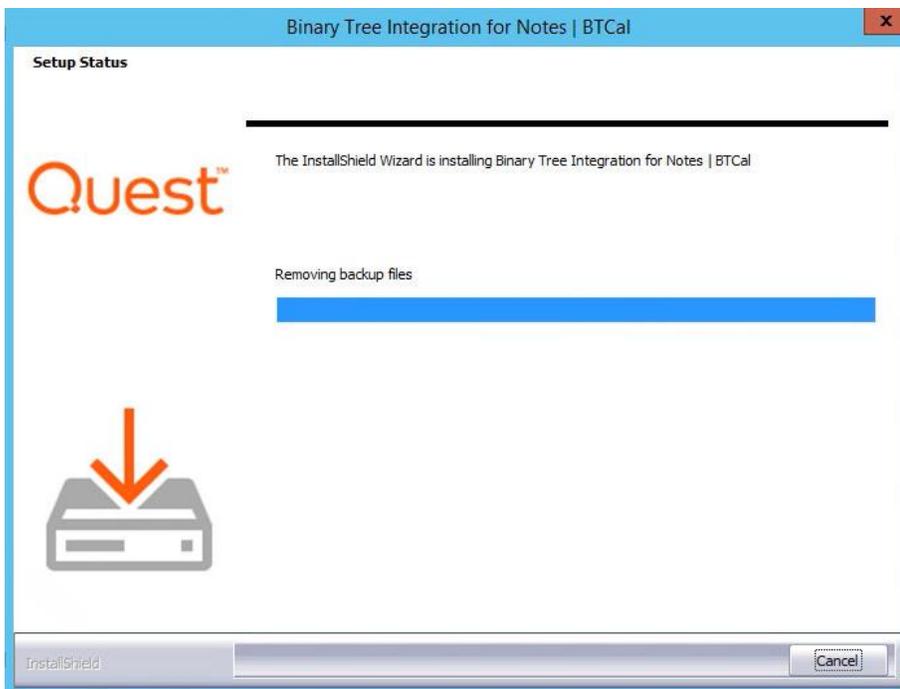
9. On the **Edit notes.ini** screen, select to modify the notes.ini file, save the required changes to a notes.ini alt file, or select to not make any changes to the notes.ini file; click **Next**. These changes must be made to the Notes.ini for Integration for Notes BTCal to run:
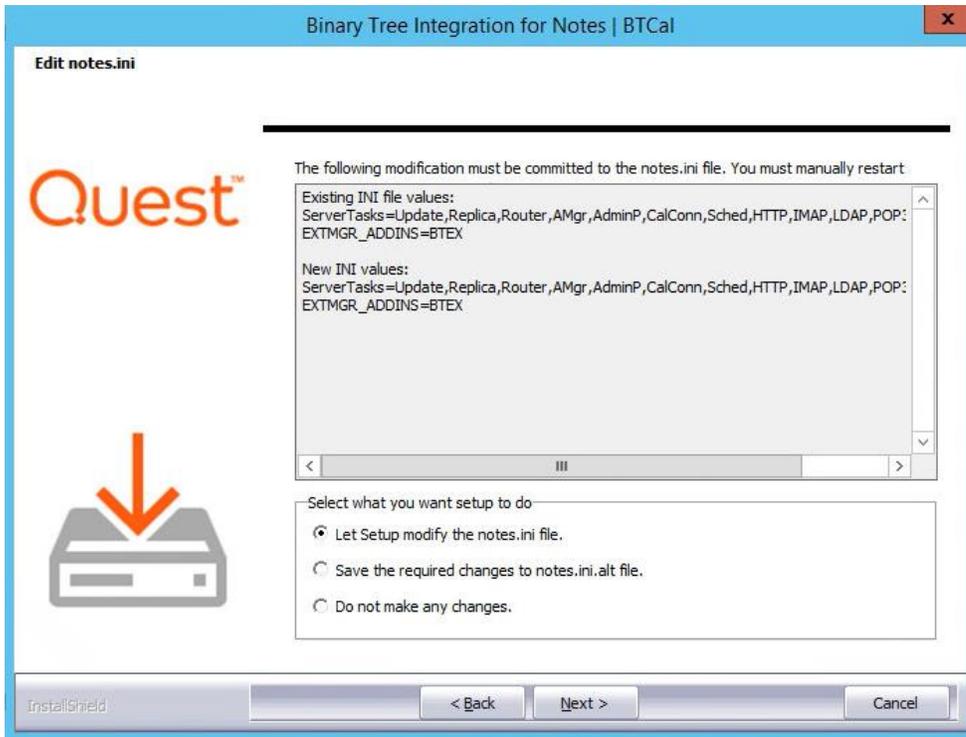
10. An informational message appears if **Let Setup modify the notes.ini file** was selected; click **OK**. Be sure to restart the Domino server for the changes to take effect:
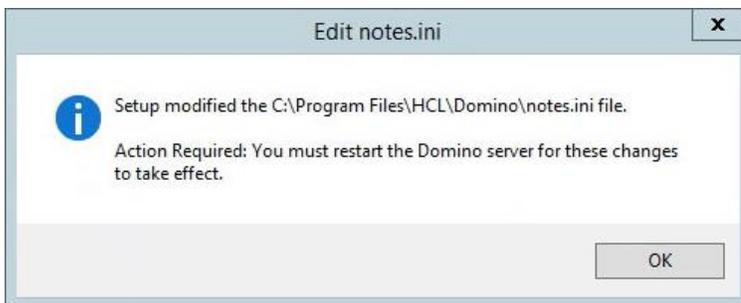
When installation completes, the wizard complete screen appears. Click **Finish** to close:
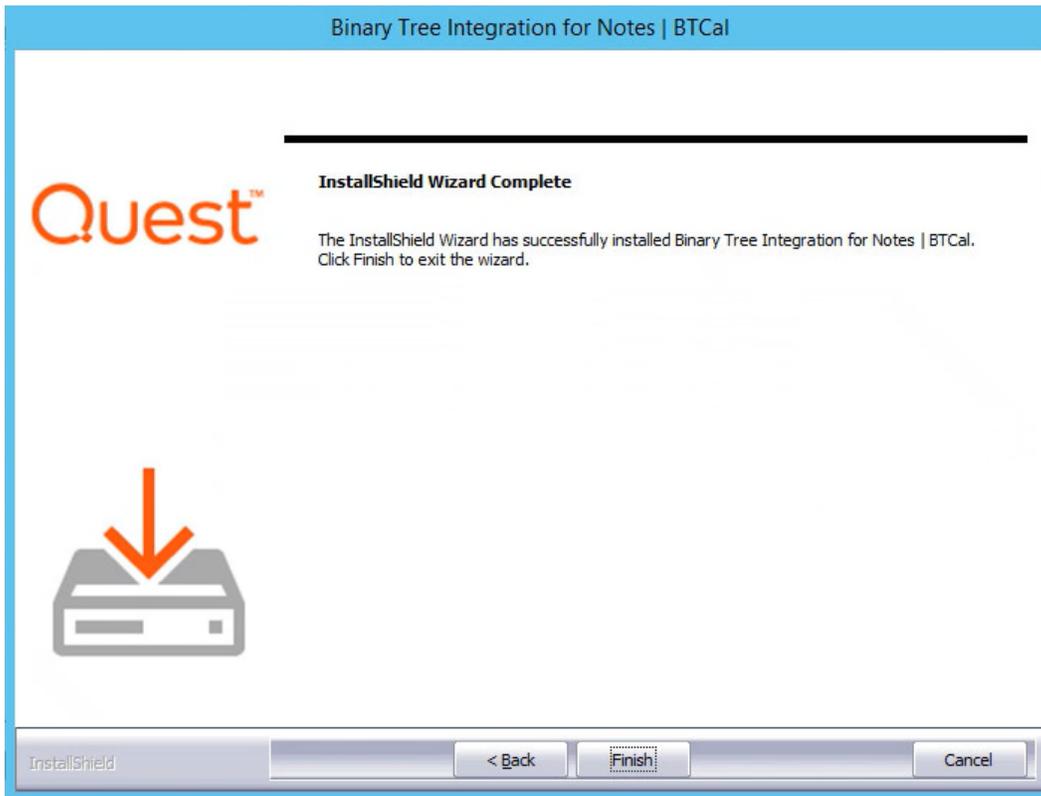
Section 10: Create and Configure Domino Databases

Once installed, BTCal will not actually start unless certain Domino databases exist. If these databases do not already exist, they must be created.

To create the necessary databases, the administrator must perform the below tasks from the Notes Administrator client for each corresponding database.

Locate the databases and templates below in the Domino server's data directory and sign them with either the server's ID or your company's preferred ECL signing ID.

Field Name	Recommended Value	Links
BTCache V3 Template	btcachev3.ntf	See Section 10.1
BT Document Store Template	btstore.ntf	See Appendix A: ZApp
BT IDVault	btidcache.ntf	See Appendix C: On the Fly Encryption and Decryption
BTCal Whitelist Template	btwhitelist.ntf	See Section 10.5
BT Calendar Cache V2 Template	btcachev2.ntf	See Appendix L: BT Stats Database
BTCalStats Template	btcalstats.ntf	See Appendix L: BT Stats Database
BT GRIP Local Template V2	btgriplocalv2.ntf	See Appendix B: GRIP
BT GRIP Remote Template	btgripremote.ntf	See Appendix B: GRIP

NOTE! Be sure to sort by filename and sign all the databases that start with "BT"

10.1 BTCache V3 Template – btcache3.ntf

10.1.1 Create the btcache database

With the Domino Coex server running, create a new application from a Domino administrator client (Ctrl-N); configure each setting as shown below:

Field Name	Recommended Value
Server	*<Domino Coexistence Server>*
Title	BTCache
File name	BTCache.nsf
Template	BTCache V3 Template
Show advanced templates	<be sure this is checked>
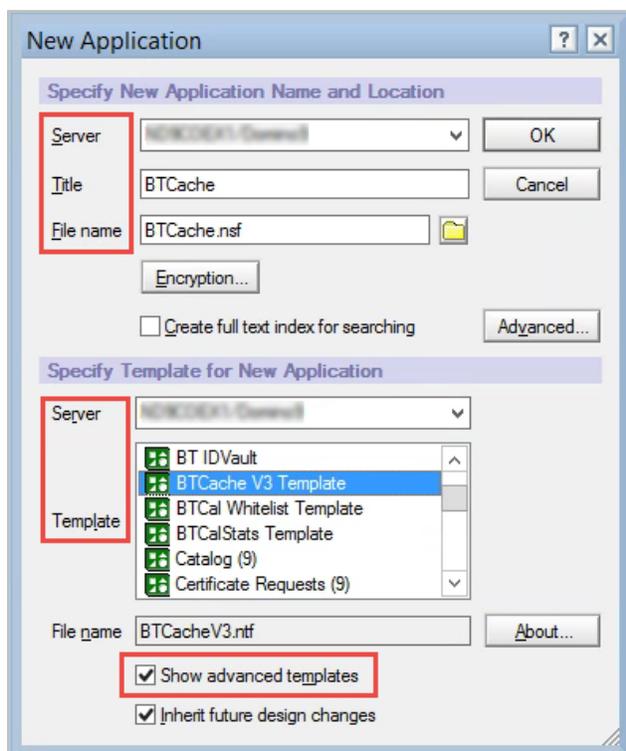
10.1.2 Purge and Archive btcache Documents

Purge and archive the BTCache calendar documents that are no longer needed. Automatic purging and archiving of cache documents is based on the $BTPurgeDate field, which is automatically set to the last occurrence of a repeating meeting.

To allow database purging or archiving of the BTCache database, purge dates (BTPurgeDate) are added

to the cache meeting documents originating from both Notes and Outlook. The BTPurgeDate is set to the end date/time of the last occurrence in an invitation. For rescheduled repeating meetings, the last occurrence date/time is compared with the BTPurgeDate in the cache and the BTPurgeDate is updated if the new date/time is greater. For a rescheduled single occurrence meeting, BTPurgeDate is updated to the end date/time of the reschedule.

There are two methods for setting the BTPurgeDate:

1. A scheduled agent runs daily at 1AM to automatically set the value

2. A manual agent can be run from the **Actions** menu

Purge Settings

Click on Settings at the top of the navigator.
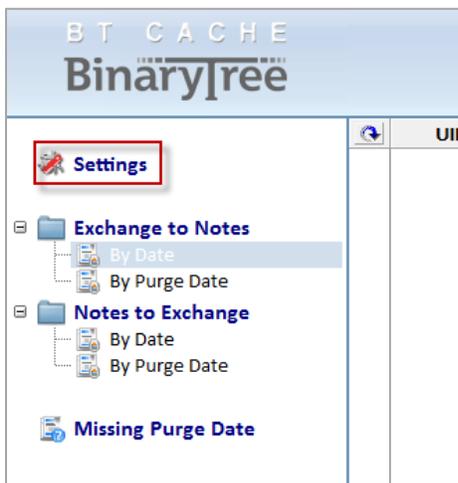
Configure the following settings to purge documents:
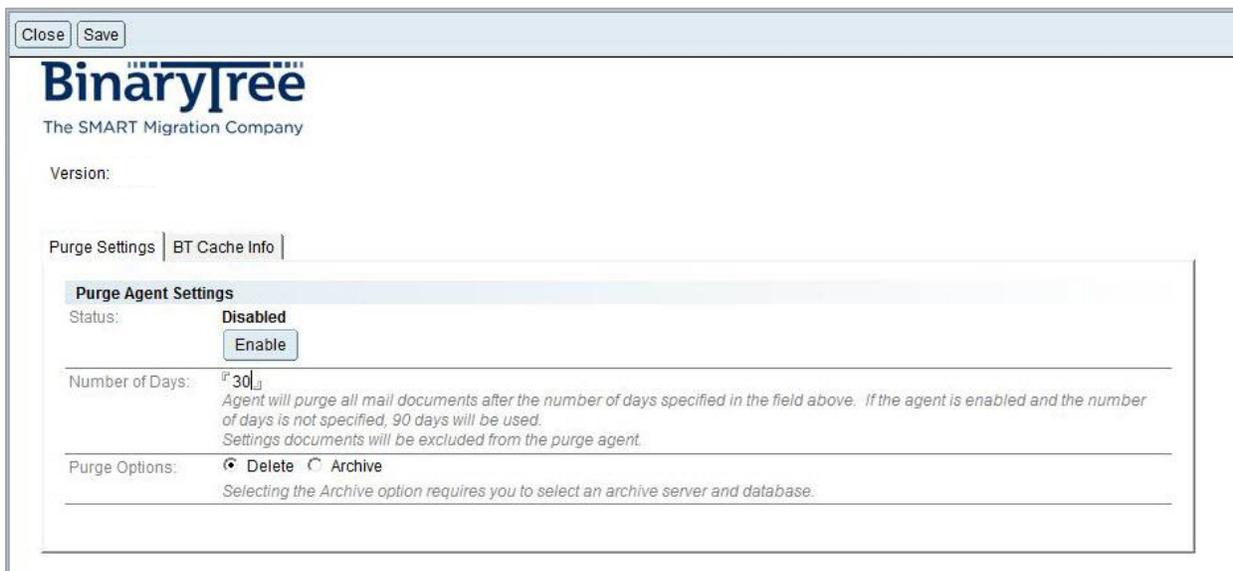
1. Click **Enable** on the **Status** line to enable the agent.

2. Enter the Number of Days after the $BTPurgeDate to delete the document(s).

3. On the Purge Options, select **Delete** to have the documents deleted from the cache database, or **Archive** to have the documents archived to another Notes database. If you will select Archive, you must also populate the following fields:

    - Archive DB Path – The Cache Archive database path where the documents will be copied. Click the Select DB button to choose a DB.

    - Archive Server – The Domino Server where Cache Archive will reside.

    Take note that the archive database must use the btcache template.

10.2 BT Document Store Template – btstore.ntf

Please see Appendix A: ZApp - Installing ZApp for information on creating and configuring the BTStore database.

10.3 BT IDVault – btidcache.ntf

Refer to Appendix C: On the Fly Encryption and Decryption for information on configuring the BT IDVault database.

10.4 Integration for Notes Router Mailbox - btexchange.box

10.4.1 Check the ACL on the Mail Router Mailbox [mailbox.ntf] for the btexchange.box database

Validate the ACL of mailbox.ntf using the values below. Include any other entries that may be required by company policy: the default ACL entries must be assigned the following values:

Name	User Type	Access
[Anonymous]	Unspecified	No Access
[-Default-]	Unspecified	Despositor
[LocalDomainAdmins]	Person Group	Manager

10.4.2 Create the btexchange.box database

Create a new database in the Data directory of the Domino Coexistence server. This database will be based on the *Domino Mail Router Mailbox* template located on the Domino COEX server. Title the new database *BT Exchange Mailbox* with a filename of *btexchange.box*. Adjust its ACL to include any other entries that may be required by company policy, but do not modify the existing default ACL entries.

The above values should match the INI variable BTEXCHANGEROUTER.

10.5 BTCal Whitelist Template – btwhitelist.ntf

10.5.1 Set the ACL of the btwhitelist.ntf Template

Set the ACL of BTWhiteList.ntf to the values shown below. Include any other entries that may be required by company policy: **The** default ACL entries must be assigned the following values. These values should match the INI variable BTEXCHANGEROUTER.

Name	User Type	Access
[Anonymous]	Unspecified	No Access
[-Default-]	Unspecified	Despositor
[LocalDomainAdmins]	Person Group	Manager

10.5.2 Create the btwhitelist database

With the Domino Coex server running, create a new application from a Domino administrator client (Ctrl-N); configure each setting as shown below:

Field Name	Recommended Value
Server	*<Domino Coexistence Server>*
Title	BTWhite List
File name	BTWhiteList.nsf
Template	BTCal White List Template
Show advanced templates	<leave unchecked>
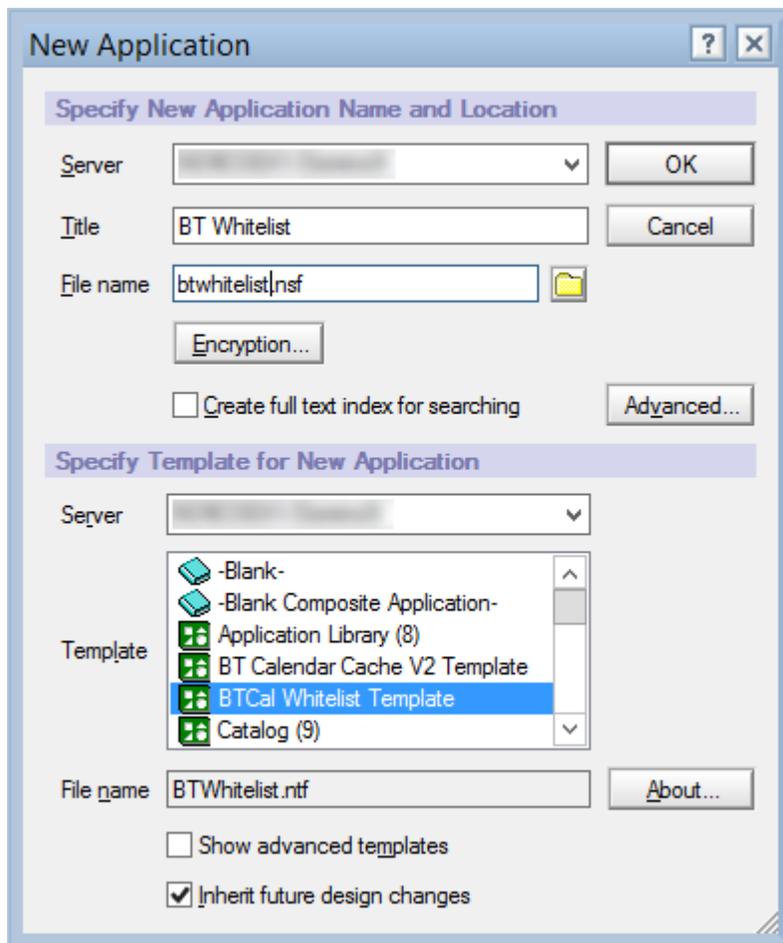
Section 11: Modify the Notes.ini File

Integration for Notes configuration is composed of making changes to the Domino and Exchange environments and by editing the Domino coexistence's Notes.ini file. The NOTES.ini file can be updated either by editing it manually or by issuing an appropriate **set config** command on the Domino Server's Console. NOTES.ini file parameters are defined as pairs of the type **Keyword=Value**, where the total length of Keyword=Value string cannot exceed 256 characters.

Configuring Domino Directories

BTCal performs name resolution against the traditional Domino Server Directory Structure. If such structure consists of more than one directory, they must be defined via either Cascading Directories or Directory Assistance. Cascaded Domino Directories are defined by names= parameter in Domino Coexistence Server NOTES.ini.

NAMES=names.nsf,morename.nsf,exchangenames.nsf

If Directory Assistance is used to represent multiple directories, refer to the Domino Server configuration documentation to configure Directory Assistance.

11.1 How to Build the Notes.ini File

A standard Domino INI file is provided below. Some variables need to be configured and require input.

Copy the variables below into the Domino INI file. For any of the variables highlighted, provide the appropriate value that corresponds with the Domino settings. For any of the variables that are not highlighted, copy the values provided below into your Domino INI file.

```
.*********************************** Begin CMTc Section ***********************************
;                                   \\\\\\\\V////////
.*********************************** Start BTCAL Section ***********************************
;
EXTMGR_ADDINS=BTEX
MIMEFORCEATTACHMENT=1
BTCACHEDB=btcache.nsf
BTEXCHANGEDOMAIN=<MSO365>
BTEXCHANGEDB=<btrouter.box>
BTEXCHANGESERVER=
BTRECIPCONVERTFIELD=<internetaddress-local>
BTPROCESSDOMAIN=,,
BTNOTESDOMAINS=_
BTDELAY=15
BTRETRYLIMIT=3
BTRETRYSENDNDR=1
BTSUPPORTMULTIPLEDOMINODOMAINS=<1>
DOMINO_FONTSIZE_CUTOFF_1=8
DOMINO_FONTSIZE_CUTOFF_2=10
DOMINO_FONTSIZE_CUTOFF_3=12
DOMINO_FONTSIZE_CUTOFF_4=14
DOMINO_FONTSIZE_CUTOFF_5=18
DOMINO_FONTSIZE_CUTOFF_6=24
BTEXPANDCALGROUPS=Y
BTSENDEXPANDED=Y
BTOUTMESSAGEMAX=1000
BTINMESSAGEMAX=1000
BTKEEPPOSTED=N
BTMULTISCHEDREPORTLEVEL=1
BTMULTISCHEDREPORTTEXT1=Dear User,\n\nThe calendar pattern used in the invitation you sent
is not supported at this time for the following reason: \n\t%REASON% \n\nThe invitation was not sent
to the following user(s):\n%RECIPIENTS% \n\nOrig
BTMULTISCHEDREPORTTEXT2=inal invitation information: \n\tSubject: %SUBJECT% \n\tDate:
%DATE% \n\nPlease reschedule using another pattern!
BTPARTIALTEXT=Room/Resource is already booked for the following date(s). \nYou must use
another time or find another resource.
BTDELEGATENDR=N
RouterOptimizePathRouting=1
BTNotifyOnDelegateOrCounter=0
BTBlockUpdateNoCache=N
BTResolveNDRRecipientsDomain= <localpart or the primary SMTP domain>
BTForceLocationResolution=1
```

```
BTResolveNDRRecipients=Y
BTPreserveAttachments=1
RouterTranslateSpecial =1
.********************************** End BTCAL Section **********************************
;                                          ////////\\\\\\\\
;                                          \\\\\\\\V////////
.********************************** Start Logging-BTCAL Section **********************************
;
BTLOGCACHE=0
BTLOGRMB=0
BTLOGUIF=0
BTLOGWMBP=0
BTLOGCONSOLE=Y
BTLOGLEVEL=0
BTLOGPNG=0
BTLOGCANCEL=0
.********************************** End Logging-BTCAL Section **********************************
;                                          ////////\\\\\\\\
;                                          \\\\\\\\V////////
.********************************** Start Shared Settings Section **********************************
;
BTWORKDIRECTORY=C:\CMTc\Work
BTLOGDIRECTORY=C:\CMTc\Logs
.********************************** End Shared Settings Section **********************************
;                                          ////////\\\\\\\\
.********************************** End CMTc Section **********************************
;
```

The table on the next page contains a chart describing each of the fields from above that requires administrator modification.

The chart below lists each field from the INI file above. The administrator must update each of these fields in the INI file to the value listed in the chart below. More information on these variables can be found in Appendix F: INI File Parameters.

Click a hyperlink name in the **INI Variable Name** column to link to more information in Appendix F.

INI Variable Name	Description	Required Value o Ex.
BTEXCHANGEDOMAIN	This parameter specifies the Foreign Domain associated with BTCal. This should be the same value as specified in Section 6.4 Foreign Domain Document **Foreign Domain Name** field. This variable is explained in Appendix F.	*Example: MSO365*
BTEXCHANGEDB	This parameter specifies the Foreign Domain mailbox associated with BTCal. This should be the same value as specified in Section 5.3 Administrator Pre-Install Checklist **Foreign Domain** field. This variable is explained in Appendix F.	*Example: btexchange.box*
BTEXCHANGESERVER	This parameter specifies the value in the Foreign SMTP Domain document and Connection Document defined in the Domino Directory. This should be the same value as specified in Section 6.4 Foreign SMTP Domain Document **Internet Domain** field. This variable is explained in Appendix F.	*Example: exch.contoso.com*
BTRECIPCONVERTFIELD	This is the value defined in DirSync. This parameter defines which Domino Directory field is used for generating SMTP address for recipients of mail items from Domino to Exchange. This variable is explained in Appendix F.	*Example: internetaddress-local*
BTPROCESSDOMAIN	This can only be 240 characters in length. This parameter contains a list of SMTP domains as specified in the Global Domain Document (see Section 6.3 Global Domain Document). This variable is explained in Appendix F.	*<list of domains>*
BTSUPPORTMULTIPLEDOMINODOMAINS	This parameter specifies whether or not BTCal should process the FromDomain field to avoid problems processing replies from Exchange to Notes originally sent from downstream Domains. This variable is explained in Appendix F.	1
BTResolveNDRRecipientsDomain	This parameter allows you to specify the SMTP domain to search if the first search fails. This variable is explained in Appendix F.	*<localpart or the primary SMTP domain>*
BTWORKDIRECTORY	This parameter defines the directory to which temporary work files used by BTCal will be written. This variable is explained in Appendix F.	C:\CMTc\Work

BTLOGDIRECTORY	This parameter defines the directory to which log files will be written. This variable is explained in Appendix F.	C:\CMTc\Logs

11.2 How to update the Notes.ini file

To make changes to the INI file, follow these steps:

1. Be sure that BTCal is offline

2. Be sure that the Domino server is down

3. Open the INI file in a basic text editor (e.g. Notepad)

4. Make the modifications and save the text file

> **NOTE !**   If using 64-bit Domino and/or a language with double-byte characters, the text file must be saved as UTF-8 without a BOM.

Section 12: Re-start BTCal Domino server to bring it online

After installing the BTCal software and applying the INI file, the Domino server needs to be restarted or brought online if not already running.

Refer to Section 14.1: Operations for more information on BTCal Domino server commands.

If the Domino server is already running, restart BTCal. To do this, first execute the quit command to stop the BTCal task:

PowerShell
tell BTCal quit

To restart the BTCal task, issue the following:

PowerShell
load BTCal

To verify the output results, an example of the BTCal log is provided below. Some of the details in the log may not be applicable.

```
> tell btcal quit
10/29/2018 12:39:12 PM  BTCal Begin termination.
10/29/2018 12:39:13 PM  BTCal Ending processor 1.
10/29/2018 12:39:17 PM  BTCal Closing Cache Collection
10/29/2018 12:39:17 PM  BTCal Closing Calendar Cache Collection
10/29/2018 12:39:17 PM  BTCal Closing Add User Cache Collection
10/29/2018 12:39:17 PM  BTCal Closing Cache
10/29/2018 12:39:17 PM  BTCal Termination complete.

> load BTCal
10/29/2018 12:39:29 PM  ### BTCal product license will expire in 290 days ###
10/29/2018 12:39:29 PM  ### BTCal ZApp support is enabled ###
10/29/2018 12:39:29 PM  BTCal Version 6.1.1.0 from Aug 29 2018 @ 13:25:58
10/29/2018 12:39:29 PM  BTCal Blocking messages from _ domains.
10/29/2018 12:39:29 PM  BTCal ZApp support is enabled to btstore.nsf
10/29/2018 12:39:29 PM  BTCal Verifying BTWorkDirectory 'E:\CMTc\Work' failed
10/29/2018 12:39:29 PM  BTCal Using temp folder 'C:\Windows\TEMP\' instead
10/29/2018 12:39:29 PM  BTCal Starting processor 1.
10/29/2018 12:39:34 PM  BTCal Reading contents of NOTES.INI from 'C:\Program Files
(x86)\IBM\Domino\\notes.ini'
10/29/2018 12:39:34 PM  BTCal Contents of NOTES.INI:

[Notes]
NotesProgram=C:\Program Files (x86)\IBM\Domino
Directory=C:\Program Files (x86)\IBM\Domino\data
KitType=2
InstallType=4
PartitionNumber=1
ServiceName=IBM Domino Server (CProgramFilesx86IBMDominodata)
showControllerStatusWindow=0
FaultRecovery_Build=Release 9.0.1
Timezone=8
DSTLAW=3,2,1,11,1,1
FileDlgDirectory=C:\Users\Administrator\Documents
SHARED_MAIL=0
DisableLDAPOnAdmin=1
Passthru_LogLevel=0
Console_LogLevel=2
DDETimeout=10
NAMEDSTYLE0=03004
10/29/2018 12:39:34 PM  BTCal Initialization complete.
```

Section 13: Verification

Proper verification of the BTCal installation can prevent future issues from occurring during coexistence.

13.1 Verify Integration for Notes

1. The Domino component of Integration for Notes is comprised of an executable (BTCal) that runs as a Domino server task, and a Domino Extension Manager dll(BTEX). These are copied into the Domino Program Directory of the Domino Coexistence Server during the installation. If a previous version of the file exists, it should be backed up for future reference. When installing or upgrading this module, stop the Domino Server.

   Once the installation completes, be sure that the following files exists in the <C:\Program Files\IBM\Domino> folder:

   - nBTCal.exe
   - nBTCal.pdb
   - nBTEx.dll
   - nBTEx.pdb

2. Verify the following items have been added to the NOTES.ini file:

- BTCal value is added to the ServerTasks parameter in the NOTES.ini file

- EXTMGR_ADDINS= BTEx is added to the NOTES.INI file; be sure that BTEx is the only extension manager add-in in the NOTES.ini file.

3. The NOTES.INI file is updated with the required and optional parameters

13.2 Complete the Validation Matrix

13.2.1 Create Test Accounts

Prior to performing the validation in the attached Excel spreadsheet, first create two Notes and two Outlook test accounts:

- The Notes users should reflect a typical end user with a similar client, mail template and mail server

- The Outlook client should match that of a typical end user

13.2.2 Misc Validation

1. As necessary, perform any additional testing that is not covered in the above matrix

2. It is recommended to also test with iNotes and OWA

After successful installation and verification of BTCal, support will transfer from the Solutions Architect and project teams to Binary Tree Support. Performing the installation and verification should provide adequate understanding of the coexistence environment and the product to assist in future interactions with Binary Tree Support.

Section 14: On-going Administration

After BTCal is installed, the administrator will need to monitor and maintain the integration. The information below will be useful in maintaining proper functioning of BTCal and provide some helpful tips on troubleshooting common issues.

14.1 Operations

14.1.1 Basic Operational Information

The information in this section summarizes the main operational components of BTCal and explains how they work. Understanding the backend operations of BTCal may be helpful when troubleshooting issues during coexistence.

Integration for Notes consists of two main components:

1. Server Task – BTCal

   BTCal Server Task is invoked by a simple load command or by its inclusion into the list of the ServerTasks parameter values in the Coexistence Domino Server's NOTES.INI file

   An example of invoking the Server Task manually is by using the following command:

Domino
load BTCal

   To determine if the BTCal Server Task is running, examine the list of Server Tasks for BT iCal Process

   BTCal Server Task accepts the following Domino Console Commands:

Command	Description
tell BTCal quit	Quits the BTCal task
tell BTCal restart	Restarts the BTCal task
tell BTCal run	Forces immediate processing of all pending messages
tell BTCal show	Shows version information
tell BTCal flushstats	Writes stats records in the queue to the BT Statistics database

14.1.2 Data Flow through Integration for Notes

The bullets below describe step-by-step how information flows from one environment to the other (Domino to Exchange and vice-versa).

Domino to Exchange

1. Exchange users are defined in the Domino Directory as users at a specific Foreign Domain (defined by Integration for Notes Server NOTES.INI parameter BTExchangeDomain)

2. The Domino Mail Router delivers data destined for Exchange users to the Foreign Domain Mailbox on the Domino Coexistence Server (defined by Notes Integration Server NOTES.INI parameter <u>BTEXCHANGEDB</u>)

3. Based on the pre-defined schedule, (defined by Notes Integration Server NOTES.INI parameter BTDELAY) BTCal periodically examines the Foreign Domain Mailboxes for messages to process

4. Any item with field RoutingState equal to "Dead" and field DeadFailureReason equal to "Pending Removal by BTCal" is deleted from the Foreign Domain Mailbox

5. Any other item is processed as follows:
   a. Each value of the Recipients field is matched against the Domino Directory
   b. If the value does not have a unique match in the Domino Directory, an NDR is generated to the originator
   c. If the value has a unique match in the Domino Directory, the value is replaced with the SMTP address that is constructed based upon the Notes.ini variables BTRECIPCONVERTFIELD (BTRECIPCONVERTFIELDMI, BTRECIPCONVERTFIELDRR, BTRECIPCONVERTFIELDGR if used) and BTEXCHANGESERVER.
   d. Field RoutingState is set to "Dead" and field DeadFailureReason is set to "Pending Removal by BTCal"

6. Domino Mail Router combined with Domino SMTP Gateway converts the item into the MIME format and delivers it to Exchange.

Exchange to Domino

1. Domino users are defined in Active Directory as Contacts or mail-enabled users with the target addresses pointing them to Domino

2. Exchange SMTP Send Connector delivers data destined for Domino users to the Coexistence Domino Server

3. Domino SMTP receives data from Exchange and places received items into a Domino Mail Router mailbox

4. BTEx examines the **From** field of each received item to determine whether it is received from an eligible SMTP domain (defined by Notes Integration Server NOTES.INI parameter BTPROCESSDOMAIN)

5. If value of **From** field is not an address representing an eligible SMTP domain, item is routed by Domino Mail Router without further processing

6. If the value of the **From** field is an address representing an eligible SMTP domain (listed in the

BTPROCESSDOMAIN), the received item is processed as follows:

    a. Each value of the From, SendTo, CopyTo, and BlindCopyTo fields representing an eligible SMTP domain is matched against the Domino Directory

    b. If the value does not have a unique match in the Domino Directory, it remains unchanged as an SMTP address

    c. If the value has a unique match in the Domino Directory, the value is replaced with the first value of the FullName field of the Domino Directory document

7. If the received item contains iCal or has one or more attachments, field RoutingState is set to "Dead" and field DeadFailureReason is set to "Pending Processing by BTCal"; BTCal is then invoked with reference to the current item

8. BTCal performs further processing of the item contents, if applicable, and releases it for further mail routing by clearing fields RoutingState and DeadFailureReason

9. Domino Mail Router delivers the item to the destination Domino mailbox

14.2 Maintenance items

The articles below are Quest's recommended maintenance procedures for your Integration for Notes environment.

Domino Statistics:

NI: Logging Domino server operational statistics.

Monthly to Quarterly Maintenance Schedule:

NI: Recommended monthly to quarterly maintenance schedule for stable environments.

General fault diagnostics:

NI: KB articles to assist in fault diagnostics and maintenance procedures

Domino Configuration backup:

The Domino configuration can be retained through a backup of the Names.nsf database and the Notes.ini for the Domino Coexistence server. This can be done following the deployment and completed again in the case of any configuration changes.

The Domino and Windows Coexistence servers can have a full backup completed following deployment through a snapshot if these are deployed to virtual server.

Domino application database backups:

The Domino Coexistence server does hold application databases (.nsf) that may have data stored and updated during processing depending on configuration.

The below listed files, if used, are recommended for a regular backup in line with the organization's policies.

- BT Cache

- BT Document Store

- BTCal Whitelist

- BT GRIP Local

- BT IDVault

It is recommended is to create replicas of these databases on a Domino server in the environment that has a regular backup schedule. Backups configured directly on the Domino Coexistence server are not recommended as these can impact performance.

14.3 Troubleshooting issues

14.3.1 Mail flow issues

This section focuses on issues with mail flow through the Binary Tree Coexistence server and will not cover how to troubleshoot mail routing issues in Domino or Exchange/O365.

Follow the set of troubleshooting steps below corresponding with the direction of the mail flow:

Notes to Exchange issues

If mail is not flowing properly from Notes to Exchange, follow the below steps to help identify the issue:

1. Stop the Router task on the Domino coexistence server

2. Stop the BTCal task

3. Send a test message from a Domino user to an Exchange user

4. Check the mail.box on the coexistence server

    a. If the test message is missing, the problem is either a routing issue in Domino or the user is not pointed to the foreign domain used by the Domino coexistence server

5. If the test message is in the mail.box, start the router

6. The test message should be delivered to the btexchange.box

    a. If the message is not delivered to the btexchange.box, the Foreign Domain document is not pointing to the btexchange.box
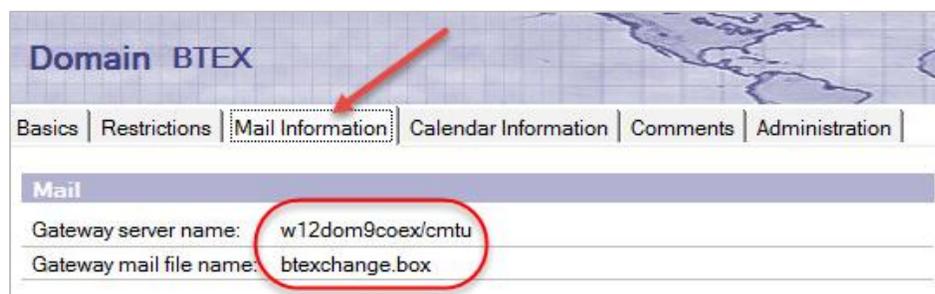
7. At this point, the test message should be in the btexchange.box and address should not have been updated; the recipient should still show as "John Doe/Corp/Contoso"

8. Stop the Router task

9. Issue the command "load BTCal" start the BTCal task

10. After processing, the message should be removed from the btexchange.box and will now appear in the mail.box

11. Open the mail.box

12. The recipient address should have been converted and now shows in SMTP format; the address will be built using the BTCal values in the Notes.INI file (BTEXCHANGESERVER, BTRECIPCONVERTFIELD (BTRECIPCONVERTFIELDMI, BTRECIPCONVERTFIELDRR, and BTRECIPCONVERTFIELDGR if used))

13. Check the SMTP address in the message against the ProxyAddresses attribute of the user in Active Directory

    a. If the address does not exist or is not matching correctly, either adjust the configuration of the BTCal settings or update the directory sync configuration to build the correct secondary SMTP address

14. If the address matches an address of the user in Active Directory, restart the router task

15. Confirm that the message is routed to the Exchange Transport server

16. If the message is not delivered to the user, troubleshoot the routing in Exchange

Exchange to Domino Routing

If mail is not flowing properly from Exchange to Domino, follow the below steps to resolve the issue:

1. Stop the BTCal and Domino router task

2. Make sure the SMTP listener task is running on the Domino coexistence server

3. Send a test message from an Exchange user to a Domino user

4. Open Mail.box and confirm the message has been received. If the message is missing check the following:

    a. Confirm that the Domino user AD object has a target address that points to the Domino environment

    b. Check routing in the Exchange environment. This will include send connectors

    c. Confirm that the Domino server SMTP Listener task is running and configured to receive mail form the Exchange environment

5. Start the routing task

6. The message should be resolved to the Domino X400 format. If the message is not resolved, confirm the following:

    a. The SMTP domain is used is listed in the global domain document as an alias domain.

    b. The Domino server is configured to perform an exhaustive address lookup

    c. The local part of the SMTP address does not resolve to a person document in Domino Directory.

14.3.2 NDR (Non-delivery report)

An NDR can be generated one of two ways. When a server in the routing path is not able to deliver a message, an NDR will be generated. This section, however, will cover the second way an NDR can be generated: when calendar items cannot be sent to an intended recipient. Though NDR messages can be customized, the following screenshot is an example of a typical NDR generated by BTCal.

The first paragraph of the NDR message (above) explains why the calendar item was not sent to the intended recipient. Use the listed meeting information (Location, Time, Chair, etc.) to troubleshoot further.

14.3.3 Address lookup issues

For name resolution issues, follow these best practices from HCL. Click the link below and follow the troubleshooting steps.

https://www-01.ibm.com/support/docview.wss?uid=swg1LO60436

Appendix A: ZApp

Choose ZApp Support Option

The administrator must determine how the ZApp software will be used prior to implementation.

Choose one of the ZApp support options below. The number of the option (0, 1, 2, or 3) will be assigned to the BTZAPPSUPPORT INI file variable.

1. Create a *Multi-Purpose Group* with the name of *BTZAppAdmins* (only required if selecting options 1 or 3); include any administrators that will be responsible for maintaining the BT Document Store database; choose these administrators with care, as members of this group will bypass document level security within the BT Document Store

   NOTE !   Best practice is not to use Nested groups as members in this ACL group

2. Click **Save & Close** to save the document

Option	Description and Instructions
0	"0" indicates ZApp is not being used or a license has not been purchased If ZApp is disabled no additional settings are required besides BTZAPPSUPPORT=0 and creation of BTStore.nsf
1	"1" will store the original body in BTStore.nsf and send a link to the user If ZApp option 1 is selected, the following ZApp parameters will need to be defined in the Coex Notes.ini: *All ZAap configurations require the following INI parameters:* • BTSTOREDB + signed it & configure ACL settings • Discuss & define BTZAPPUNIQUECOPY parameter (Y/N) • Discuss & define BTZAPPCHECKENCRYPT parameter (default = 1) (0/1/2) • Discuss & define BTZAPPORGs (O, O1, O2) • Discuss & define BTZAPPTABLES (Y/N) • Discuss & define BTZAPPIGNOREELEMENTS (if wish to exclude a ZAPP criteria) • Define BTZAPPREADERS group (Notes NAB group) • Discuss & define BTZAPPSENDORIGINAL parameter (0/1/2/3) • Confirm with client the text associated with BTSTORETEXT# (text body to user)
2	"2" will convert the original body into an attachment and send it to the user If ZApp option 2 or 3 is selected, the following ZApp INI file variables will need to be defined: • BTSTOREDB + signed it & configure ACL settings • Discuss & define BTZAPPCHECKENCRYPT parameter (default = 1) (0/1/2) • Discuss & define BTZAPPORGs (O, O1, O2) • Discuss & define BTZAPPTABLES (Y/N) • Discuss & define BTZAPPIGNOREELEMENTS (if wish to exclude a ZAPP criteria)

- Define BTZAPPDB & place copy of signed template on each CMTc Domino server (define template used to create attachment for ZAPP)

	Combination of 2 & 3
3	ZApp offers multiple configuration options/settings to meet the client or application owner's needs. Please review the additional settings after configuration of Integration for Notes as it can slow down the process to test and retest ZApp functionality. It is best to include customer/client resources in the configuration and understanding of the ZApp toolset.

Installing ZApp

Installing ZApp consists of adding the BTStore.ntf template and creating a new BTStore database for the configuration. Create a new database in the Data directory of the Domino Coexistence server based on the *BTDocument Store* (btstore.ntf) template. Title the new database *BT Document Store* with a filename of *btstore.nsf*.

If the ZApp database has already been created, open it and follow the configuration steps below

Add the BTStore.ntf Template

1. After installing Integration for Notes the **BTStore.ntf** template will appear in the **Domino Data Directory**:
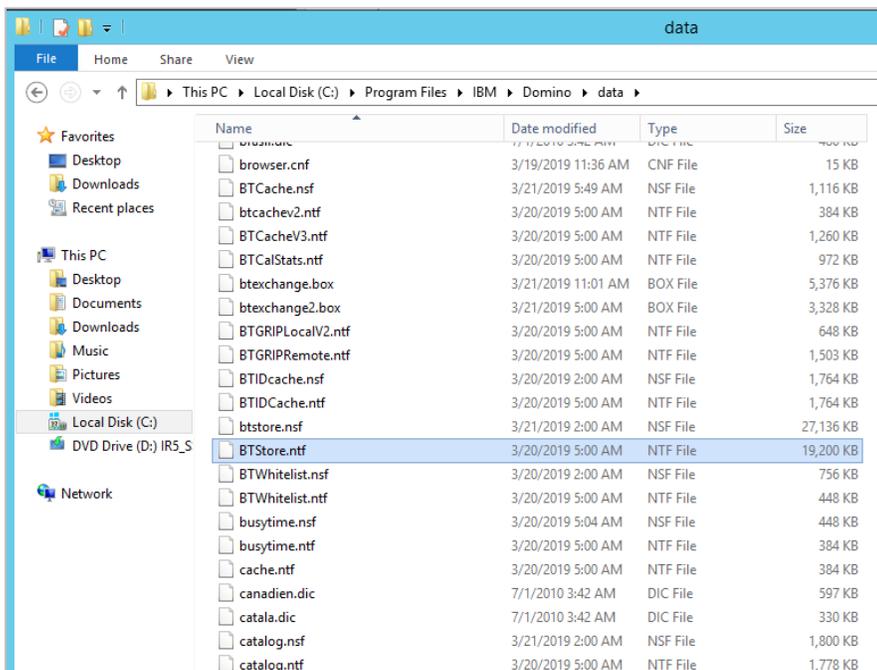
2. If the template does not appear in the data directory, reinstall Integration for Notes and verify the ZApp module is selected

3. The coexistence server may need to be restarted to use the new databases created from the copied template files

Configure Security for BTStore Database for Integration for Notes

Integration for Notes uses a mail-in storage database to store all mail-enabled application messages in a single store repository that provides document-level security and allows Exchange/Outlook users to access any applications during coexistence.

1. Open the Domino Administration client on the coexistence server

2. From the Domino Administrator, open the server, and then navigate to the **Files** tab as shown below; select **Databases only** from the **Show Me**: drop-down box
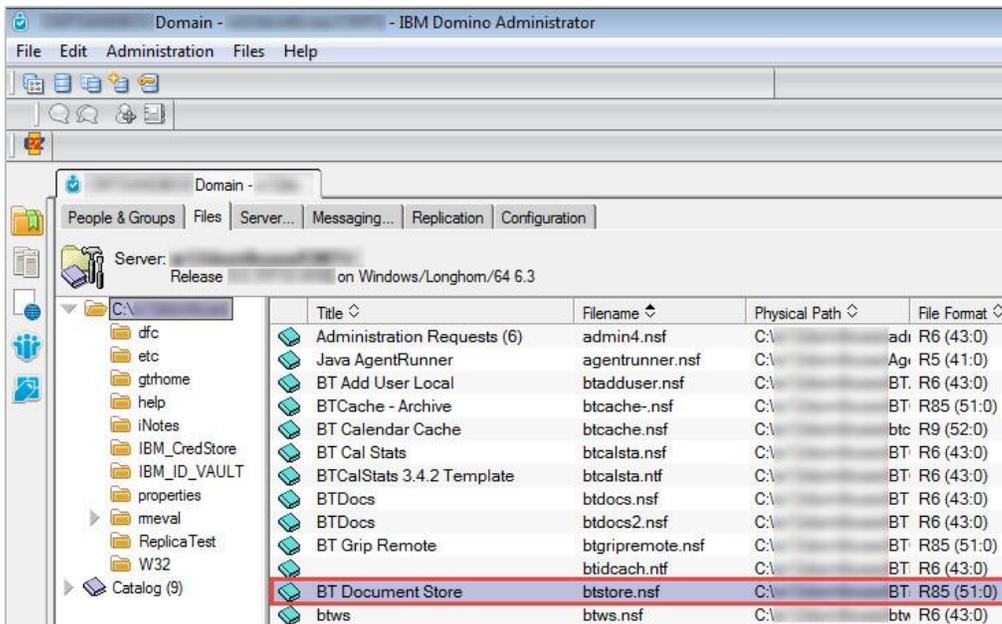
3. Right-click **BTStore.nsf**

4. Select **Access Control** -> **Manage** to set up the ACL as shown below:
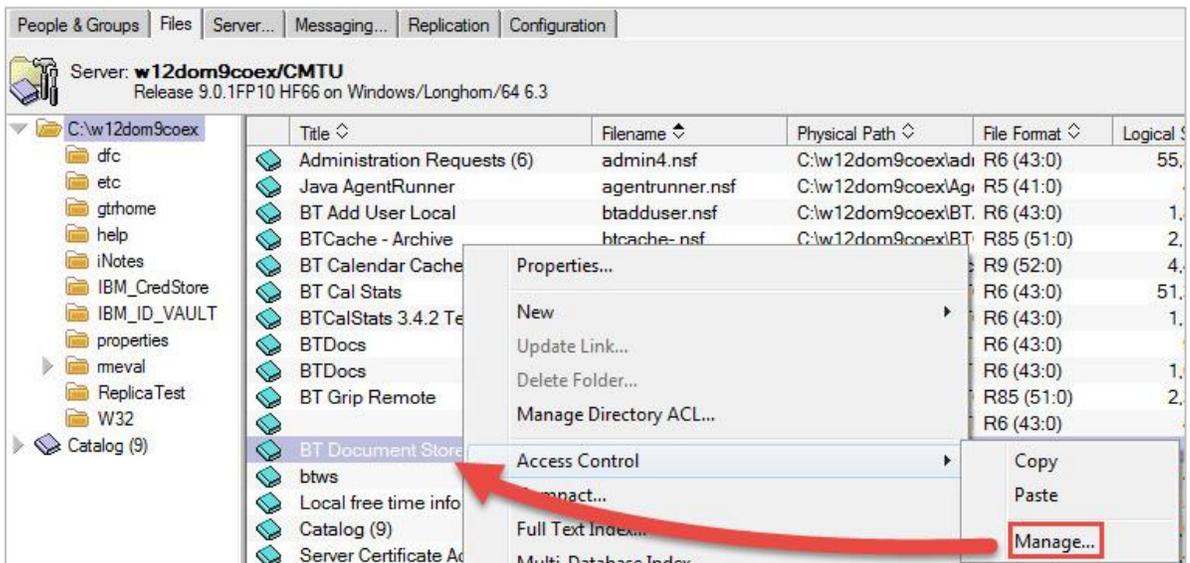
5. Because the database is new and not signed or secured, if a prompt appears to cross-certify the signature as seen below, select **Yes**:
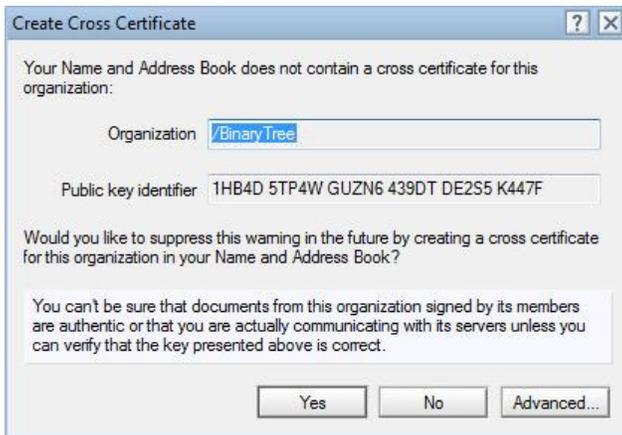
6. The ACL displays; add the Domino Administrators for the domain or LocalDomainAdmin as shown below and click **Add**; from the **Add User** dialog box, select LocalDomainAdmin, and then click **OK**:
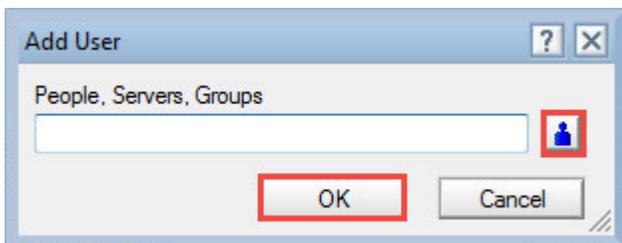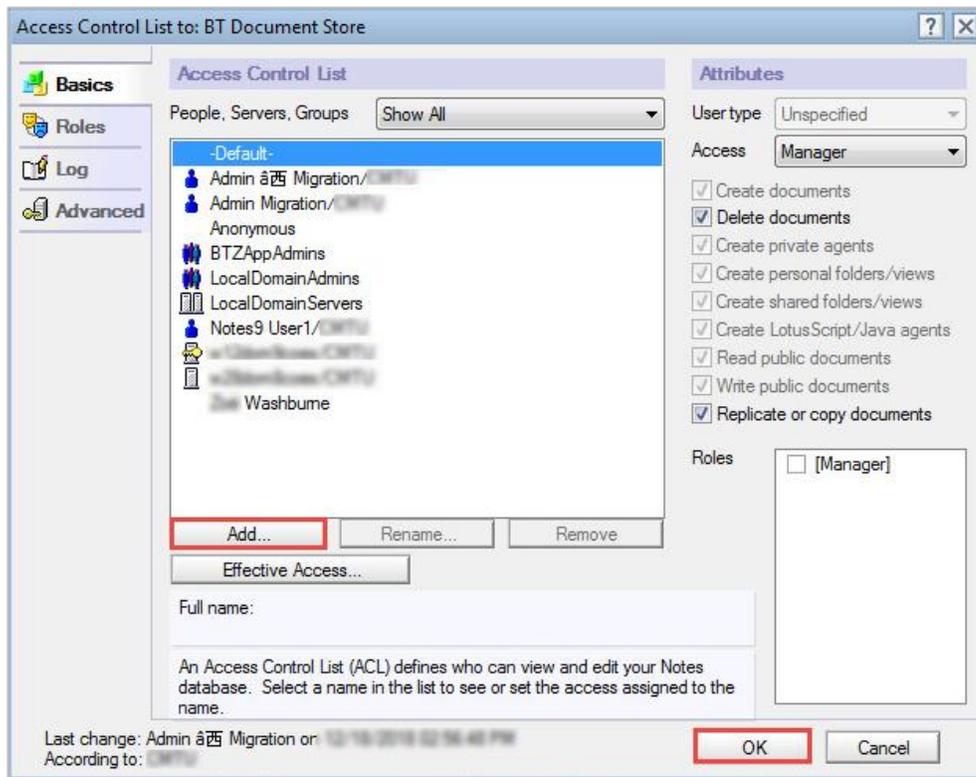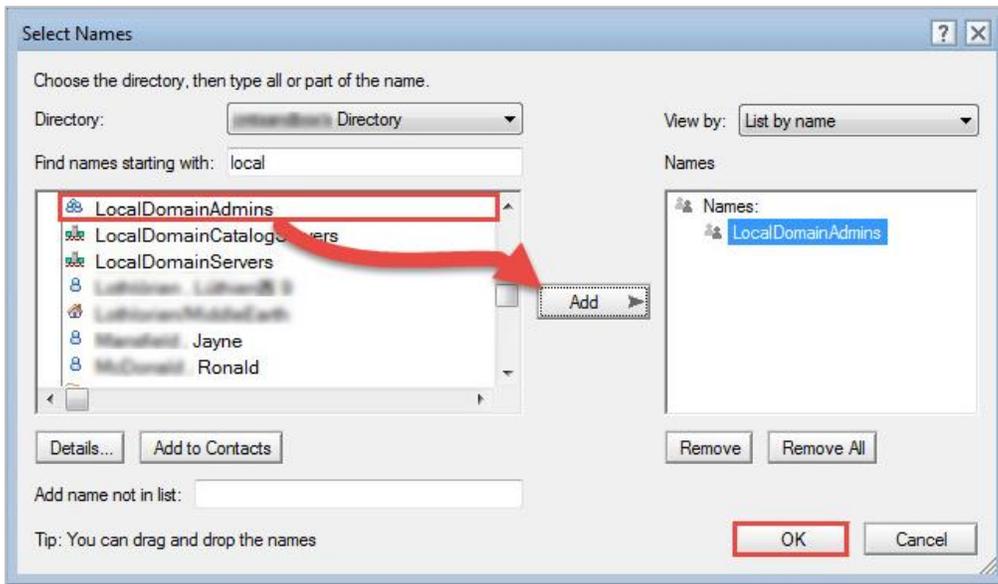
7. Change the user types to **Person group** for LocalDomainAdmins as shown below; additionally, grant the LocalDomainAdmins [Manager] role to view additional configuration options in the BTStore database:
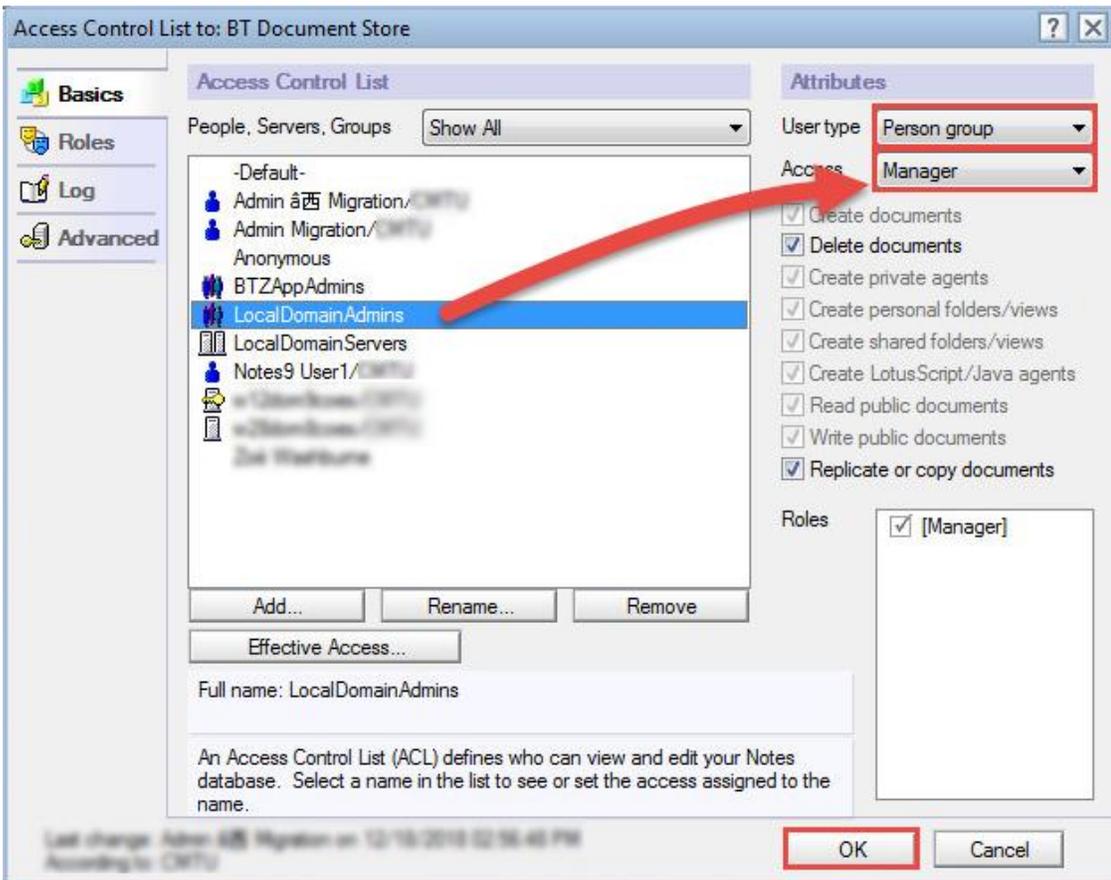
8. Demote the **Default** group by giving it only **Author** without delete access; this database has

document security and its own set of purging options, as you do not want users deleting documents even by mistake:
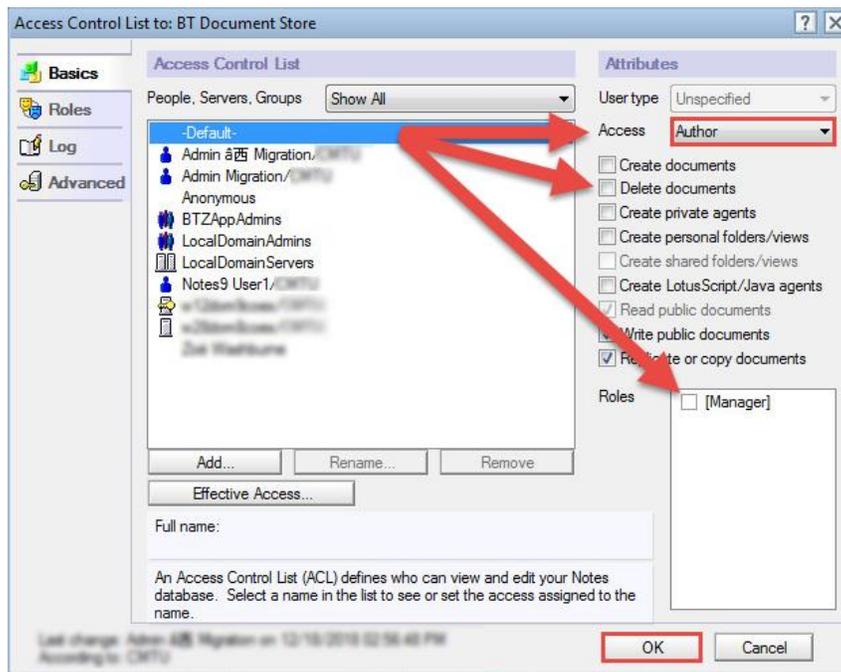
Configure ZApp NOTES.INI Parameters

The ZApp NOTES.INI parameters are defined in the Zero-Touch Application Remediation (ZApp) section.

Copy the following parameters to your Notes.ini file if they are not currently present at the end of the Binary Tree Customizations. The values below are what is shown by default. You may to change some of the values to meet your deployment needs.

```
;Begin ZAPP ini settings

BTSTOREDB=BTStore.nsf

BTSTORETEXT1=email sent to you from Notes contains specific elements requiring Notes
Client\n\nPlease press link below to access it\n\n

BTSTORETEXT2=This is BTStoreText2.\n

BTSTORETEXT3=This is BTStoreText3.\n

BTSTORETEXT4=Click here for Server Access [<a
href="notes://<servername>/86257316:0041FCE6">Click Here</a>]\n

BTZAPPBYPASS=1

BTZAPPCHECKENCRYPT=1 (Not needed if using On the Fly Decryption and
Encryption)

BTZAPPENCRYPTTEXT1=Dear User\n\n\tYou cannot access the contents of this document
```

because they are encrypted with a Notes certificate.

BTZAPPENCRYPTTEXT2=\n\nThese cannot be read.

BTZAPPORGS=CMTU

BTZAPPREADERS=LOCALDOMAINADMINS

BTZAPPSENDORIGINAL=0

BTZAPPSUPPORT=1

BTZAPPIGNORESTOREDFORMS=0

BTZAPPUNIQUECOPY=Y

BTZAPPTABLES=Y

;End ZAPP ini settings

ZApp Administration Functions

Now that the BTStore database has been created on the Coexistence server, the Administration settings for the database can be configured.

1. Open the server document from the **Domino Administrator Client** and navigate to the **Files** tab as outlined below

2. Before opening the new database, sign it by the server to avoid any ECL prompts. Right-click the database and select **Sign**

3. Double-click on the **BTStore.nsf** database to open it and set the **Administration** properties as shown below

General Settings

- **Enable ZAPP Logo** will display the BTZapp icon in the top left corner of messages if set to **Yes** (OR refer to the database Help)
- **Prevent storage of e-mails generated in this database**, if set to **Yes**, will prevent the storage of messages replied to or sent from within BTStore database
- **Hide BCC**, if the BTZAPPUNIQUECOPY configuration parameter is set to NO, will prevent the viewing of BCC recipients in a shared message. If set to **Yes**, the user can receive links to messages missing their name in the header fields
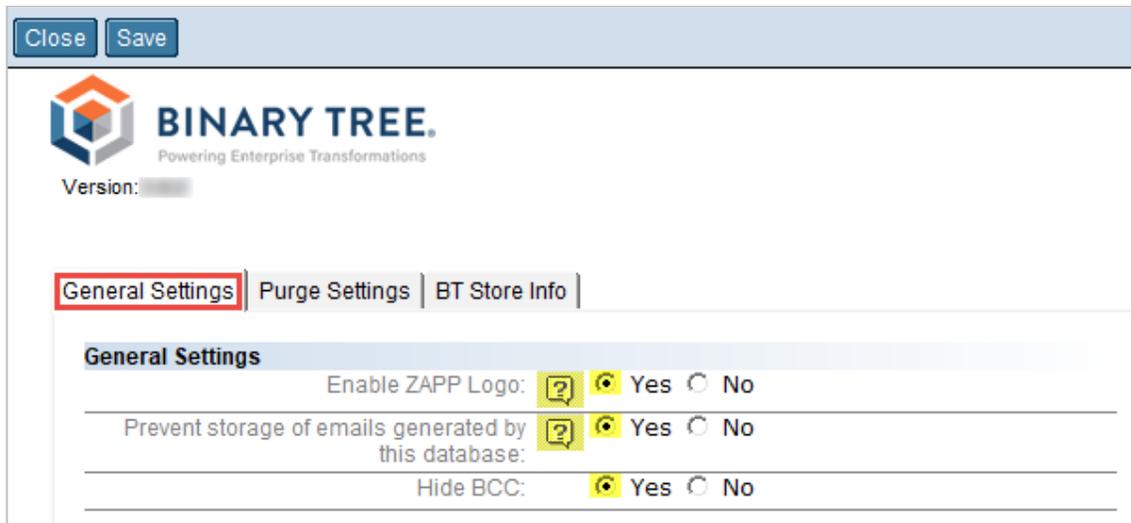
Purge Settings:

- **Status**, when **Enabled**, will automatically purge all mail documents after the number of days specified in the **Number of Days** field
- **Days** indicates the number of days to keep documents in the BTStore database
- **Choose Server To Run On** – Pick the Domino server to run the purge agent (enable the purge agent on the administrative server)
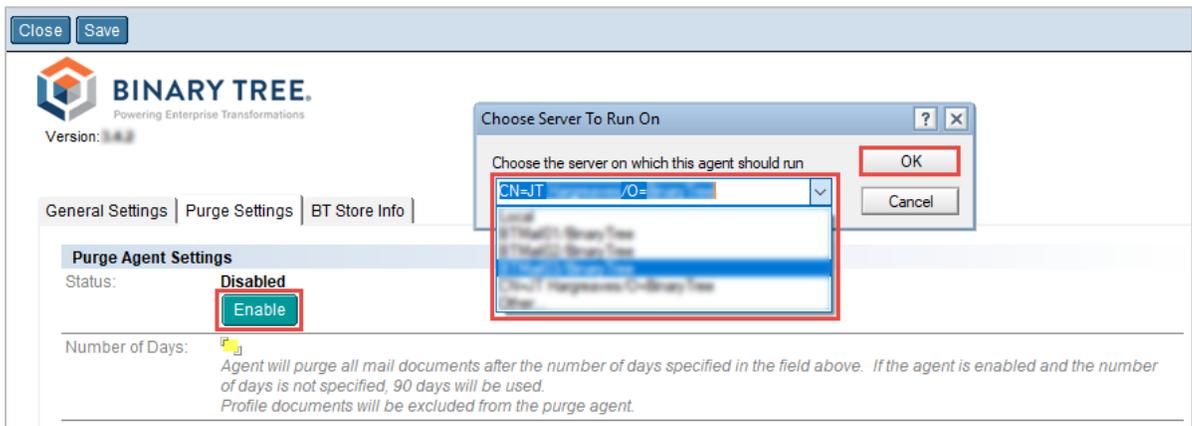
BT Store Info tab

1. Set the DB Owner field value to either Admin or Agent ID
2. Set the **Production Date**; this is the date that BTCal will go into production
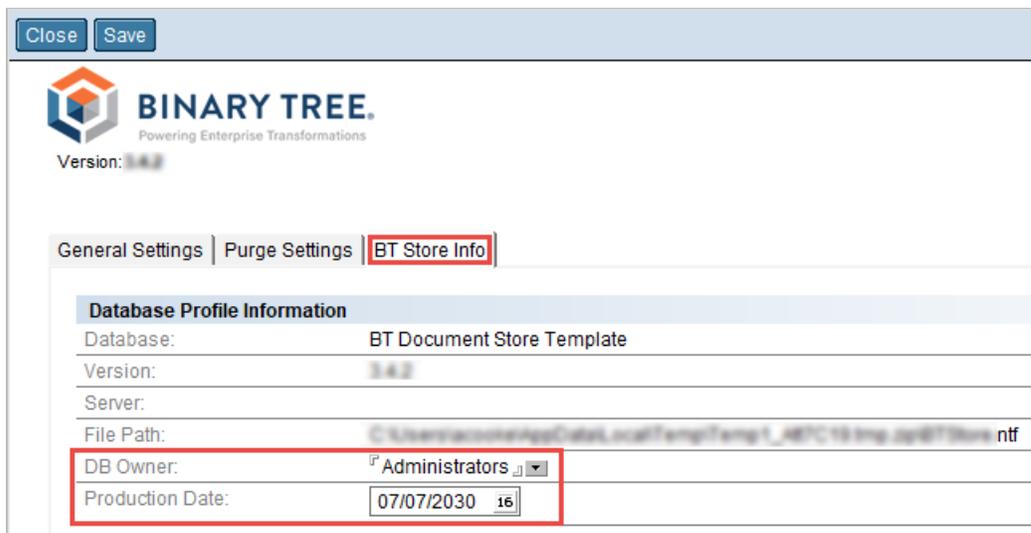
Testing ZApp

To test the ZAapp process, restart the BTCal task on the Coexistence server, then create a test email that is to be remediated for having a hotspot button.

1. From the console of the Coexistence server, enter the command **Tell BTCal Quit**, and then when it terminates, enter the command **Load BTCal**

2. From Migration Administration e-mail file, create a new memo to an Exchange and add a hotspot button as shown below

3. Create a simple button with a message box

4. Send the e-mail to the Exchange User, and then open the ZApp Database to see if it was remediated

5. The screenshot below shows what a plain ZApp notification looks like; the actual message that Exchange/Outlook users will see may be different depending on how ZApp is configured

Appendix B: Configure GRIP

This section contains general information about the GRIP feature. For installation instructions, please refer to the attachment at the end of this section (Installation and Configuration of the GRIP Subsystem).

Feature Description

When one or more users are added to an existing Notes repeating meeting, the new users receive an invitation in which the meeting is represented as a series of dates rather than by the original recurrence pattern. While a Notes Client is able to process a repeating meeting without a well-defined recurrence pattern, a Microsoft Outlook Client is unable to process such a meeting.

Additionally, if the original meeting had any changes to any of the occurrences, the new users receive a number of exceptions: updates, reschedules, or cancellations depending on the type of changes. While a Notes client has the ability to automatically process all exceptions (options to ignore them or process them one at a time are also available), an Outlook Client must process exceptions one at a time. Thus, to support the ability to add Exchange Users to existing Domino repeating meetings, the information about the original recurrence pattern must be obtained and used by BTCal when constructing the invitation to Exchange users.

The process of gathering information about the original meeting from the Domino Chairperson's calendar is referred to as GRIP (Get Repeating Invitation Pattern).

How GRIP Relates to BTCal

When BTCal encounters an invitation from a Notes user, adding an Exchange user to an existing Notes meeting, it uses GRIP, a process that involves multiple mail-in databases, to manage the addition.

Installation and Configuration of the GRIP Subsystem

For step-by-step instructions on installing and configuring GRIP, please refer to the Integration for Notes Installation and Configuration of the GRIP Subsystem guide.

Appendix C: On the Fly Encryption and Decryption

On the Fly Encryption and Decryption (OTFe) is an advanced feature in BTCal that uses standard Domino encryption to automatically decrypt messages sent from Domino to Exchange, and encrypt messages sent from Exchange to Domino.

For Decrypting mail there are two deployment options:

The first option is to use the BTCal database BTIDCache.nsf, where the system can be configured in several scenarios, from using the IBM IDVault to using the ID and password stored in the BTIDVault database.

The other deployment model requires a modification to the Mail file template for all Domino mail users, so that whenever a message (or calendar item) is encrypted, a specific user is automatically added to the BCC field of that item. Integration for Notes will use that ID to decrypt the message before it is routed to Exchange.

Encrypting items from Exchange to Domino requires that the message (or calendar item) be marked as Private.
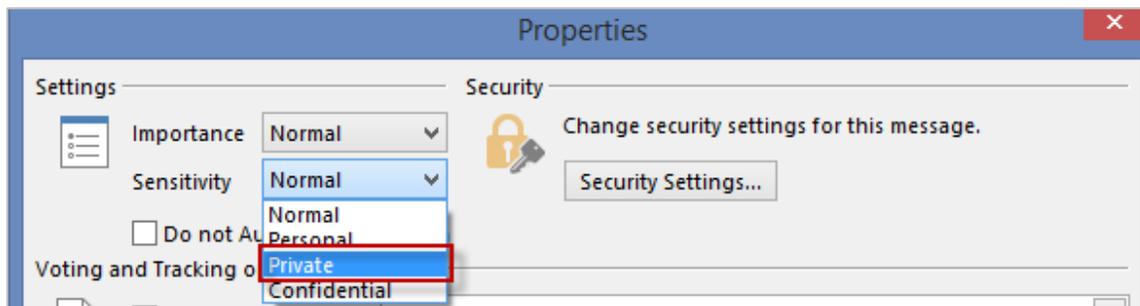
Integration for Notes will utilize the Public Keys in the Domino Directory to encrypt the messages for each Domino recipient.

NOTE ! In Notes 8 and newer, encrypted messages are broken up into multiple messages if the recipient list is larger than 400 bytes. In these cases, if using the BCC field, only one message would include the BCC recipient. Therefore, Decryption Option 1 (below) is recommended if the BCC field is used.

Prerequisites & Settings

Decryption Option 1 (Recommended)

Create the BTIDCache Database in the Integration for Notes Domino Data Directory using the installed template:

1. Configure the database; see the Configuration of the Domino Database section below for more information; use the IBM IDVault database as the preferred configuration

2. Configure the following Notes.ini values on all Domino Coexistence servers:

INI Variable Name	Description	Value
BTEncryptDecrypt	0 - disabled (default) 1 - encrypt and decrypt 2 - decrypt only 3 - encrypt only	*Example value:* *1*
BTIDVault	0 - disabled (default) 1 – Enabled	*1*
BTIDFileLocation	BTIDFileLocation= BTIDVaultDB BTIDVaultDB (default) – Uses the BTIDVault database which will store the users ID and password FileSystem – Uses a central file share repository that holds all backup copy of the user's ID files. The password will be stored in the BTIDVaultDB PersonDoc – Backup copy of the ID files will be stored in the person docs with in the Domino Directory; password for the ID files will be stored in the BTIDVaultDB DominoIDV – Backup copy of the ID Files will be stored in the IBM IDVault Database, with the corresponding passwords in the BTIDVaultDB DominoIDV2 – The users ID in the Domino IDVault Database, and the corresponding password will be provided Automatically by the Domino API; for this configuration option, the "Check Password setting in the senders person doc must be set to "don't check password" PerUser – This option allows the configuration to be done at the user level individually selecting the first five options	*<BTIDVaultDB>*
BTIDVaultDB	This variable sets the file name for the BTIDVault Notes Database	
BTIDsDir	This variable sets the path information of the Senders notes ID when the BTIDFileLocation=FileSystem	

If using any options other than DominoIDV2 in the INI setting **BTIDFileLocation**, user information will need to be gathered for each user. The following section explains how this will be accomplished with the database defined in the **BTIDVaultDB** INI setting.

Decryption Option 2

The mail file template for all Domino users must be modified so that any time a message is marked for encryption, the Domino user account used for On the Fly Decryption and Encryption is added to the BCC field. This account should be an administrative account with a valid ID, password and certificate.

The Domino user account used for On the Fly Decryption and Encryption must have a valid Notes Certificate in their Person Document in the Domino Directory, but it does not need a mail file associated with it.

The Domino user account ID file used for On the Fly Decryption and Encryption must be on all Domino Coexistence servers. The password for this ID may be stored in the Notes.ini or in a text file the Domino Coexistence server(s).

All Exchange Recipients must also have a valid Notes Certificate in their Person Document in the Domino Directory.

The following Notes.ini values must be configured on all Domino Coexistence servers:

INI Variable Name	Description	Value
BTEncryptDecrypt	0 - disabled (default) 1 - encrypt and decrypt 2 - decrypt only 3 - encrypt only Note: the last two values do not have a use at present and are broken out in case they are needed for future use cases	*Example value: 1*
BTDecryptID	This is the ID file that is associated with the user account that is added to the BCC field of encrypted messages (from Domino to Exchange)	*<ID file name, full pathname if not in the Data folder>*
BTDecryptEmail	This is the Notes name of the account used for on-the-fly encryption/decryption	
BTDecryptPasswordFile	Use this INI parameter if you will be storing the password for the BTDecrypt ID in a text file; this must be a plain text file that contains nothing but the password for the BTDecrypt ID file. OS security can be enabled on this file, as long as done with windows server account used by the Domino server.	*<full path and file name>*
BTDecryptPassword	Use this option is you will be storing the password for the BTDecrypt ID in the Notes.ini file	*<password for the account used for on-the-fly encryption/decryption>*

Encryption Options

INI Variable Name	Description	Value
BTEncryptDecrypt	0 - disabled (default) 1 - encrypt and decrypt 2 - decrypt only 3 - encrypt only Note: the last two values do not have a use at present and are broken out in case they are needed for future use cases This setting must be set even if the BTIDVaultDB is being used	*Example value: 1*
BTDominoEncryptDomains	This is a multi-value, comma separated parameter that should contain a list of Domino domains to be included in processing On the Fly Decryption and Encryption	
BTCalTargetAddressPrefix	This is the value that is prepended to the SMTP address when creating the TargetAddress. The above value is a typical example (domino.); note the value ends with a period, since that too is prefixed to the base smtp address for Domino users - as happens when the AD SMTP address of "Jane.Smith@contoso.com" is stored in the AD targetAddress as a value of "Jane.Smith@domino.contoso.com")	*Domino*
BTLeaveKeepPrivate	• When set to 0, Integration for Notes will delete the $KeepPrivate item, which allows the Notes user to reply with history or forward to the encrypted memo, as well as respond to calendar items. (Recommended) • When this is set to 1, $KeepPrivate will remain in place, which will result in not being able to reply with history, forward or respond to calendar items • This setting will override SMTP_NO_MAP_PERSONAL, SMTP_NO_MAP_PRIVATE and SMTP_NO_MAP_COMPCONF; these are Domino-specific INI settings that control mail behavior when set to Personal, Private or Confidential. For more information, refer to IBM's documentation and knowledgebase; if this is set to 1, the chairperson will receive an NDR from any Domino rooms or resources in the invitation	*Examples: 0/1 (default=0)*
BTScanSubjectForEncryptFlag	• If set to 1, Integration for Notes will encrypt any item that has the value of BTScanSubjectFlag in the subject of the message; this allows Exchange users to encrypt items from mobile devices • If set to 0, Integration for Notes will not encrypt any items based on the subject content	*1*
BTScanSubjectFlag	This value is used to allow Exchange mobile users to put a keyword in the subject of an email to have that message	*<text>*

INI Variable Name	Description	Value
BTEXPANDCALGROUPS	• The three existing INI parameters defined when mail group membership is expanded during the routing process	*N*
BTEXPANDMAILGROUPS		*N*
BTEXPANDGROUPS	• If these are set to N (no), On the Fly Decryption and Encryption requires that groups be synched or represented as member-populated groups in the target directories; if groups are represented as Contacts (Exchange), or as Person documents (Domino), sending encrypted message to the group will result in an DNR (see NDR49) • If these are set to Y (yes), groups will be expanded prior to the decryption/encryption process, so they will be decrypted or encrypted as expected	*N*

It is strongly recommended to investigate how these setting will impact the messaging environment before making any changes.

Customizable NDRs

As with other Integration for Notes NDR messages, there is a single customizable message, and 4 customizable encrypt NDR's reasons. The default text is listed below. These are customized in the same manner as any BTNDR text:

INI Variable Name	Description	Value
BTENCRYPTFAILTEXT	This is a multi-line value that supplies the generic NDR email text. Example: • BTENCRYPTFAILTEXT1=There was a problem delivering your message to a Notes user, group, or mailbox.\n\n • BTENCRYPTFAILTEXT2=%REASON%\n\n • BTENCRYPTFAILTEXT3=Thank you for giving this matter your prompt attention.\n If not supplied in Notes.ini, it defaults to the values used in the first 2 lines above	*Examples:* *Thank you for giving this matter your prompt attention.\n*
BTNDR49	*"An encrypted copy of the message could not be delivered to the following Domino Group(s): %GROUPLIST%.\r\nPlease re - send the message using individual recipients."*	
BTNDR50	*"An encrypted copy of the message could not be created for the following Notes recipient(s): %RECIPIENTS%.\r\nPlease contact the HelpDesk."*	
BTNDR51	*"An encrypted copy of the message could not be delivered to the following Notes recipient(s) : %RECIPIENTS%.\r\nPlease contact the HelpDesk."*	

| BTNDR52 | *"This meeting contains more text than BTCal can process for Domino users.\r\nPlease recreate it using less than 25K of text."* |

Configuration of the Domino Database

With the recommended option 1 of not using a customized mail template, the configuration will require the corresponding BTIDVaultDB to be deployed to all Integration for Notes servers in a replicated model with the exception that the customer is using IBM Domino IDVault Database and it has been configured to allow applications to have access to the ID files. The following will cover how to deploy the database for all other scenarios:

Installing the BTIDVaultDB is a simple process of adding the template and creating a new BTIDVaultDB.nsf in the Domino Data directory.

Creating the ID Vault Database

1. After the installation of Integration for Notes, the **BTIDCache.ntf** template will appear in the **Domino Data Directory**

2. If the template is not displaying in the data directory, reinstall Integration for Notes

3. The Coexistence server may need a restart to use the new databases created from the copied template files

4. Create the BTIDVault.nsf from this template and note the file name as it will need to be added in the INI parameter **BTIDVaultDB**, then proceed with the configuration

Setting up Security for the BTIDVaultDB Database

Integration for Notes uses a mail-in storage database to store all mail-enabled application messages in a single store repository that provides document level security and allows Exchange/Outlook users to access any applications during the coexistence period.

1. From the Coexistence server, open Domino Administration Client

2. From the Domino Administrator, open the server, and then navigate to the **Files** tab as shown below, select **Databases only** from the **Show Me:** drop-down box:
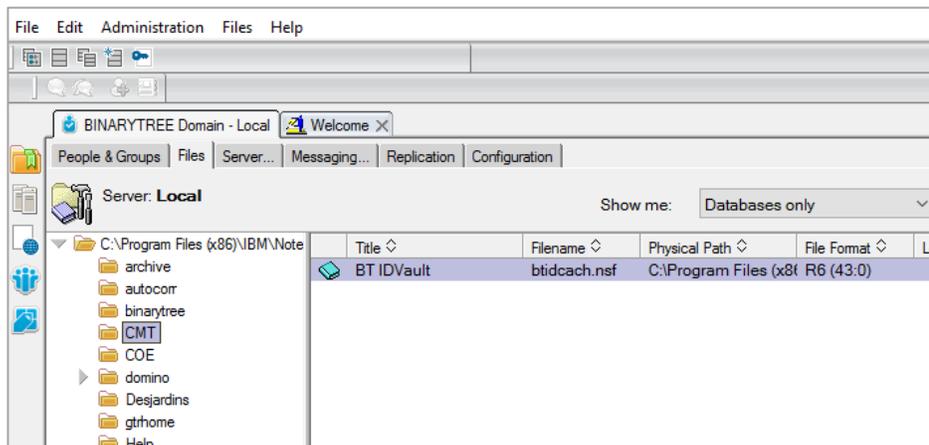
3. Right-click **BTIDVault.nsf**

4. Select **Access Control > Manage** to set up the ACL as shown below:
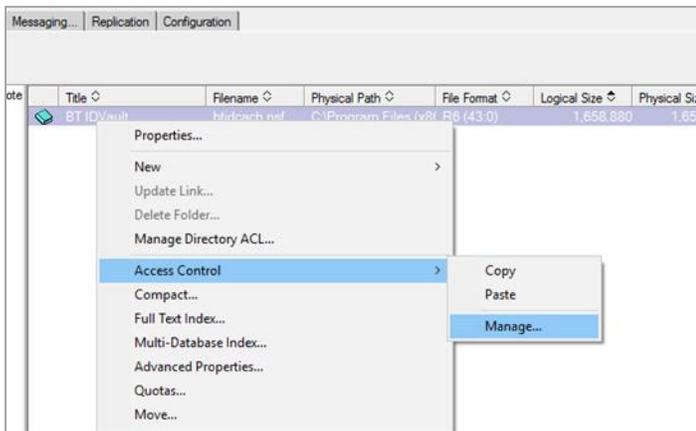
5. Because the database is new and not signed or secured, if you receive a prompt to cross-certify the signature as seen below, select **Yes**:
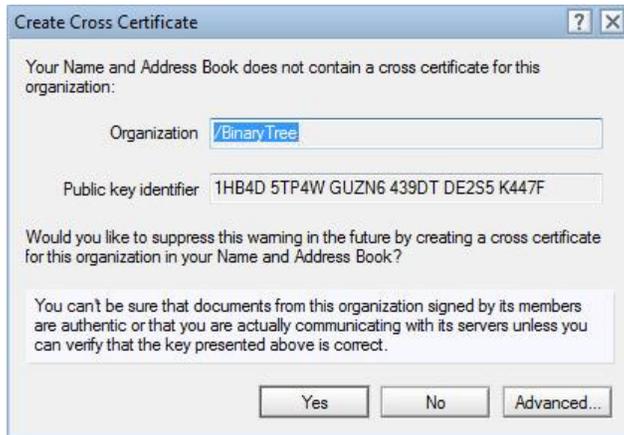
6. The ACL displays. Add the Domino Administrators for the domain or LocalDomainAdmin as shown below and click **Add**; from the **Add User** dialog box, select **LocalDomainAdmin**, and then click **OK:**
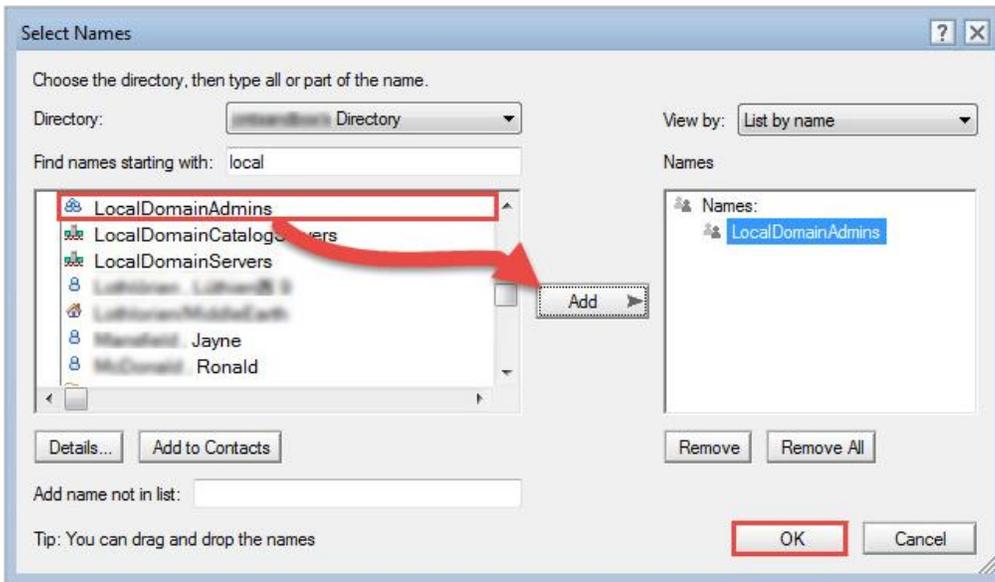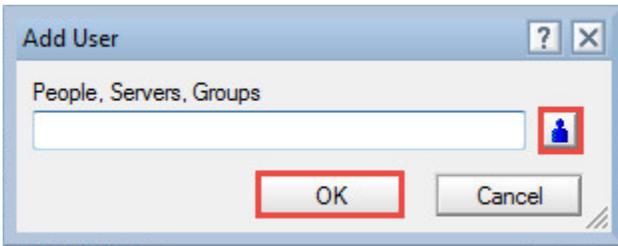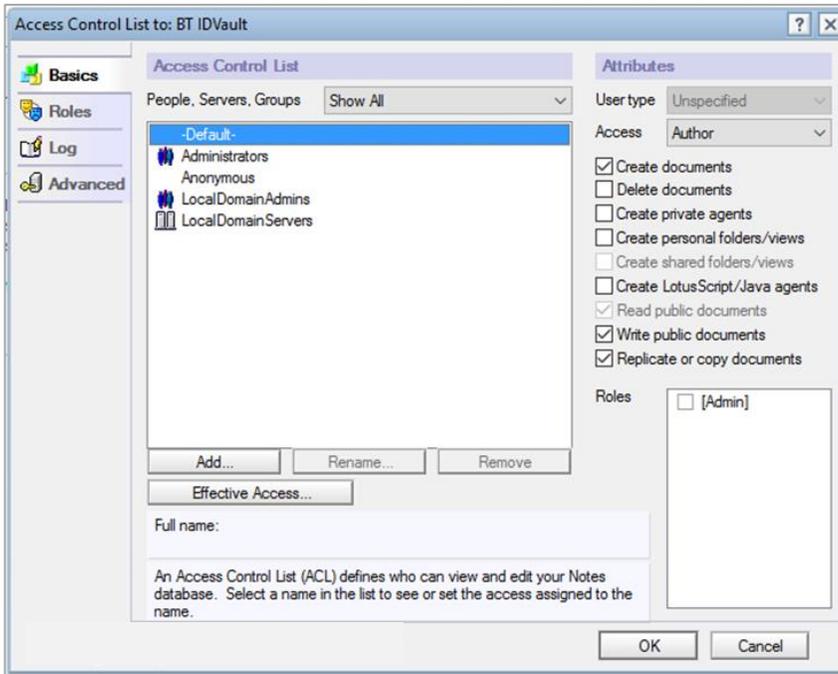
7. Change the user types to **Person group** for LocalDomainAdmins as shown below. Additionally, grant your LocalDomainAdmins [Admin] role to view additional configuration options in the BTStore database:
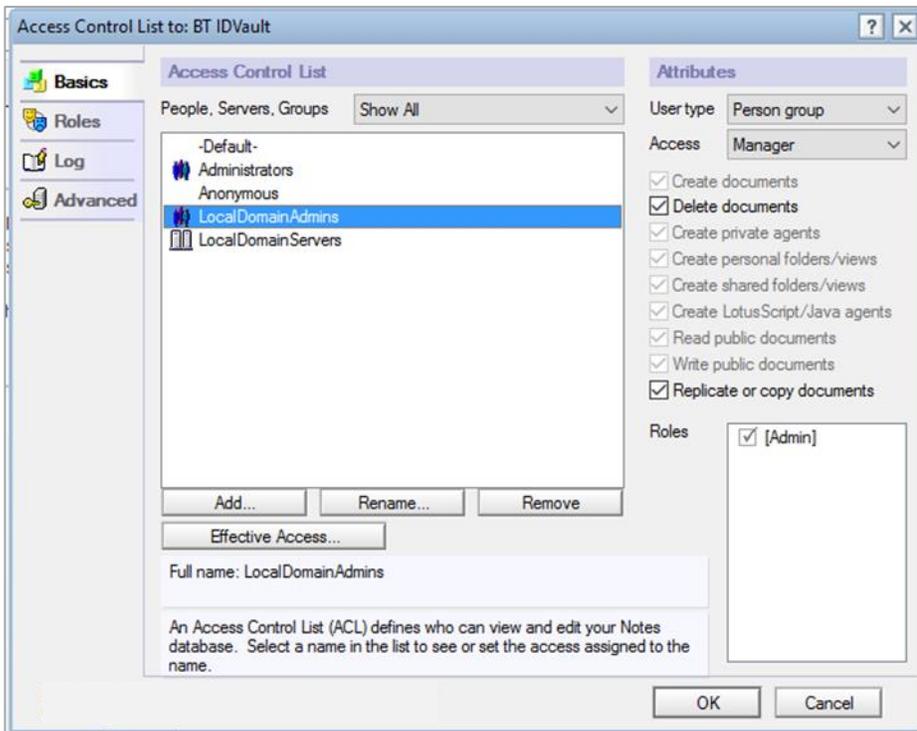
8. Demote the **Default** group by giving it only **Author** without delete access; this database has document security and its own set of purging options to prevent users from deleting documents even by mistake

Configuring the Settings in the BTIDVault Database

Confirm the INI setting defined in the section **Prerequisites & Settings/Decryption Option 1 (Recommended)** and proceed with this database for all options in the INI parameter **BTIDFileLocation** except "DominoIDV2".

Once in the database is opened expand in the left navigator the section **Configuration** and select **Settings**. Configure the database as follows:

On the **General Setting** tab set the following values:

1. **Coex Server Name** – This is the Domino server that the users will be populated from

2. **Domino Directory File Name** – Domino Directory that the user record will be created from

3. **Server Mailbox** – Populate this with the Router mailbox tnat will be used to send messages from

4. **Domino INI Setting Option** - This should be set to the option set on the Domino COEXT server for the INI value BTIDFileLocation

   NOTE !   The options on the rest of the configuration and how the database will interact with the user is depended on this setting.

5. **Default Network Path** - Enter the network path where the backup copy of the ID files are stored; this can only be a single value entry is used if the INI settting is set to "File System"

6. **Default Password** - Value set to Domino ID file on creation

7. **Delete Process Messages** - Since the database has the ability to send request for users to collect ID and Password this option allow the cleanup of the responses if environment policy do not dictate that all electronic communication be saved

8. **Web Host Name** - The database has the ability to collect user information via email or a website; the website can also be used to maintain the account information for the users; this is the URL for the database

   NOTE !   HTTP services will need to be configure on the Domino COEX server, and a DNS name registered in the customer's environment if not using the Domino server name in the URL.

9. **Success Message** - Message that will display when the user Successful perform an action via the website

Mail-enabling BTIDVault Database

A Mail-in Database Document is required for mail to be delivered to the newly created BTIDVault database. The procedure copies the database to the server and creates a Mail-In database document for the Notes Migrator database.

1. Create a mail-in database for BTIDVault database; click on the **Server Db Copy and Mail-In Db Doc** button to create a copy of the BTIDVault database on the Domino server and configure the Mail in Database document:

2. The **Does BT IDVault already exist**? dialog box opens; click **Yes** (and skip to step 5):

3. If working with a local copy of the BTIDVault database, then click **No**. The **Create a db copy?** dialog box opens

4. Click **Yes** to create a copy of the local BTIDVault database on the server

5. If **Yes** was clicked in the **Does IDVaultDB already exist?** dialog box, the **Choose Application** dialog box opens. Locate the Notes Migrator database in the CMT folder on the server, and then click **Open**

6. The **Fullname for the mail-in db doc** dialog box confirms that the mail-in database for the selected server-based BTIDVault database does not exist and prompts to specify a name for the mail-in database; after specifying the name, click **OK**

7. In the **Open the new mail-in doc?** dialog box, click **Yes** to open the mail-in database

   a. The mail-in database document for BTIDVaultDB opens

8. To verify the creation of the mail-in database, launch Domino Administrator, open the Domino server, and access the **Mail-In Databases and Resources** folder under the **People & Groups** tab

9. Double-click the document to open and review

10. Once the mail-in database is successfully created, the **Open Mail-In Db Doc** button replaces the **Server Db Copy and Mail-In Db Doc** button; clicking it opens the database document for a review; clicking the button with the X sign on it will remove all pointers to the location of the mail-in database

11. It is recommended that after copying the database to the server, you delete the database from the local client folder; to remove it, right-click on **BTIDVaultDB on Local**; select **Database**, and then **Delete**; the Notes client prompts that the database and related documents will be permanently deleted; click **Yes** to delete the local database

Modifying the Inbound Processing Agent

Once the database has been mail-enabled, modify the Inbound Processing agent to view the updates. Perform the following steps to run the agent.

1. With Domino Designer open the BTIDVault database in Domino Designer

2. Expand **Shared Code** and select **Agents**

3. Select the **InboundProcessing** agent as shown below

4. Double-click **InboundProcessing** to open the **InboundProcessing Agent Properties**

5. Click the **Security** tab

6. The **Administrator** should be listed in the **Run on behalf** of section

7. In the **Set Runtime security level:** field, select **Allow Restricted Operations with full administration rights**

8. Once you've edited the agent, close the **Properties** box

9. Close the **Inbound Processing – Agent** tab

10. Save the changes

11. Click **Sign**

Message Templates

Message Templates can be used for communication with the end users via Notes mail messages. These messages can be used for informational purposes only or they may contain action buttons with associated code designed to perform specific tasks. These messages are created using the Message Templates.

1. Click **Message Templates** in the Navigation Pane; the Data Pane displays a list of predefined message templates

    NOTE ! Each predefined Message template has a specific purpose. To create a custom template based on a predefined template, select the predefined template before

clicking the New Template button.

2. Select a predefined template and click the **New Template** button in the Data Pane

3. A new tab opens and displays a form where the details of the new Message Template can be specified; notice that the tab clearly specifies that the new template is based on the predefined template; when saving this template with a new name, however, the tab will reflect its new name

4. Customize the new template; refer to the table below for details on settings

5. Once all the details have been specified, click Spell Check to ensure there are no spelling errors in the message

6. A message box appears to confirm that no misspellings were found; click OK to close the message box

7. Next, save the new template; click Save & Close

The following table describes the values for each setting:

Settings	Description
Template Name	Specify a name for the template that best describes the purpose of the new message template
Template Type	Specify the type of the new message template, such as Email Only or ID Retrieval
Return Notification	Specify whether you want a return notice from the end user when the message is received and the required action is performed
From	Specify the name of the entity sending this migration message to end users (for example, Migration Coordinator)
Subject	Specify a brief description of the purpose of the new template
User Action Required	Check this box if migration for this user cannot proceed until the user performs the embedded action within the message This check box also indicates that the user will remain in the Pending Reponses view until they perform the end user action in a particular message template
Message Body	Specify a customized message

The new template is saved and it appears in the list of existing templates

Types of Predefined Message Templates

The database comes with predefined Message Templates which are designed to perform specific migration tasks. The information contained within these predefined templates can be modified to tailor them to a client's needs. Predefined Message Templates can be of the following types depending on the actions they perform:

- Gather ID and Password Info
- Notification Only Email

Gather ID and Password Info

This message is used to gather User ID and password information

Notification Email Only

As the name implies, Notification Email Only is designed for informational purposes only and does not include any action buttons. Notification Email Only templates can be used to keep the end users informed.

Importing Users

Users from the Domino Directory must be imported into the database.

> **NOTE !** Ongoing maintenance of users as they are added, deleted, or renamed must be maintained in this database. Also, if Password Policies exist in the environment, management of this must be considered for this database.

With the database open, expand in the left navigator the section **Configuration** and select **Import Users**. Import users as follows:

1. Click on the **Import Users** button and select either **All Users** or **Select Users to Import** (to select specific users)

2. If Select Users to Import is selected, choose users to import in the **People view in the Address Book** and click **OK**

3. On the confirmation screen, click **OK**

Sending User Notifications

Notification will be sent to the end users. These may be for relaying information, delivering end user driven action buttons for actions such as gathering ID and password information or both.

Send End User Notifications

To send a notification:

1. Expand **User Notifications** and click **Send** in the Navigation Pane

2. Select all the user documents in the Data Pane to whom the notification will be sent

3. Click the **Send Notifications** button in the Data Pane

4. In the Message Templates dialog box, a list of available predefined templates is displayed; if custom templates have been created, these will also be listed; select the desired template to send and click **OK**

5. The progression message box displays; after a few seconds of processing, another message box displays confirming that notifications have been sent to selected users; click **OK**

6. After sending the first notification to the users, the users remain in the Notify step under the **Pending Responses** view so that all desired notifications can be sent to the user

Pending Responses

Notifications where users are required to click an embedded button in the email are processed differently. If users don't click the buttons, their response is considered pending and is listed in the **Pending Responses** view. To check if there are any pending responses from the sent notifications, click **Pending Responses**.

For example, if John Smith has not performed the required action. The Data Pane will show that two

notifications have been sent, one requires user action, and no response has been received. In a situation like this, another notification can be sent prompting users to respond to migration notifications.

Responses Received

Responses can also be seen in the Responses view; click **Responses Received** in the Navigation Pane

Errors

If needed, check to see if there were any errors during the sending of the notifications; click **Errors**

Incoming Email Responses

The Incoming Email Responses view shows user responses sent in via email

How it Works

Encrypting from Exchange to Domino

- Exchange-generated email sent to Domino users that is marked private or has the property ICCategory=4 will be encrypted; before submitting an item for encryption, Integration for Notes will validate that all users in the recipient list have a Public Key in the Domino Directory; if any recipients do not have a Public Key, an NDR will be sent to the originator

- These items will be marked as **Private** in the recipients' inbox

- If BTScanSubjectForEncryptFlag=1 and the subject contains the text value in BTScanSubjectFlag the messages sent from Exchange to Domino users will be encrypted; this is to allow mobile users to encrypt messages sent from smart phone

- For Domino users to reply with history and respond to calendar items, "**Prevent Copy**" (Notes feature) is NOT set on encrypted items from Exchange

- When Calendar invitations are encrypted, they will appear as a memo with a meeting.ics attachment in the Domino user's inbox; when the item is opened it will be converted to a typical invitation

Notes:

- Exchange generated email with external recipients should not be routed through the Domino Integration for Notes servers, therefore not encrypted

- Encrypted calendar invitations from Exchange to Domino will initially arrive as an email with a meeting.ics attached, not an invitation:
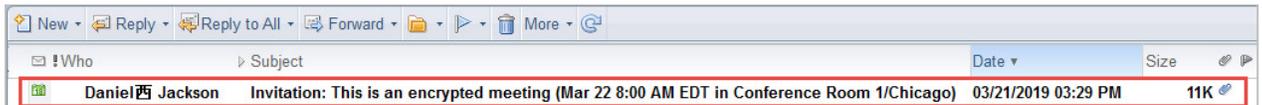
Once the email is opened, it is properly displayed as an invitation:
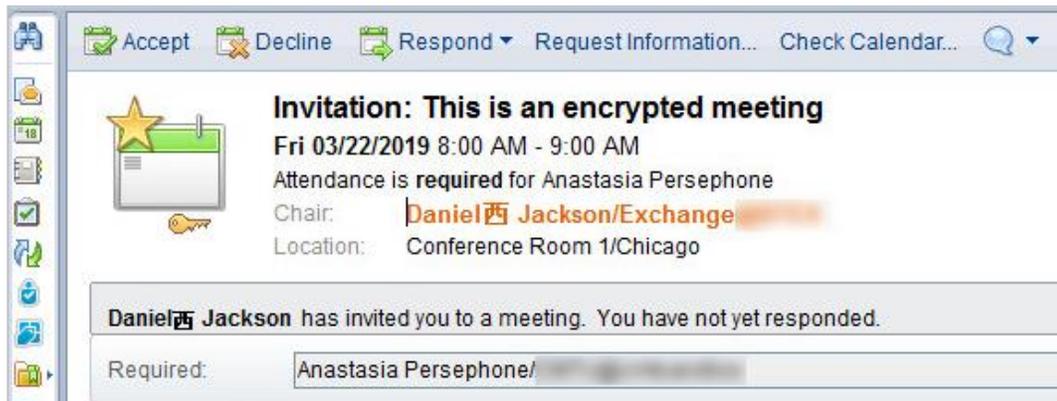
- There will also be an additional email version of the item in the inbox; if the Notes preferences are set to not to remove items from the inbox after processing them, two items will show for each invitation:
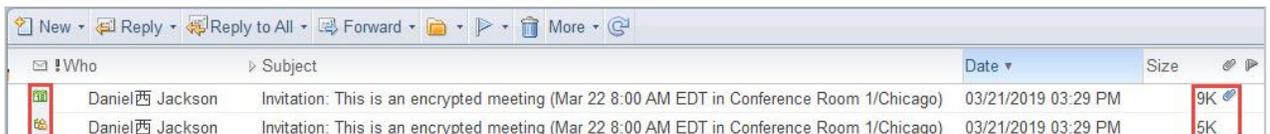
Decrypting from Domino to Exchange

Decryption Option 1

When any encrypted item is sent from a Domino user to an Exchange user, BTCal will stop the message and start the decrypting process if the INI setting **BTIDVault is set to 1**. BTCal will perform the following steps:

- BT will look at the INI variable BTIDFileLocation to determine location of the user's ID file and if needed the password

- Depending on the configuration for the location of the ID and password, the process will open the ID to allow access to the message content

- After the message is opened the encryption will be removed

- Once the message is decrypted, BTCal will update the header of the message and pass it to Domino to deliver the message to the Exchange/O365 environment

Decryption Option 2

- When any encrypted item is sent from a Domino user to an Exchange user, it will be decrypted using the BTDecryptID specified in the Notes.ini file of the Domino Coexistence server

- The user account associated with this ID must be in the BCC field when the item is sent. If is not listed on the email (therefore it's not possible to decrypt), then Integration for Notes will automatically fallback to whatever process is specified for BTZAPPCHECKENCRYPT in the Notes.ini

- Invites with Rooms and Resources – The BCC account is hidden; if there is a room, however, it goes to the router before BTCal, so resource reservation will show BCC; Note: Users can see BCC in properties (not the BCC field in UI)

Appendix D: Disable Encrypted Message Routing

The notes.ini parameter **BTBlockNotesEncrypted**, when enabled, blocks any encrypted message from Domino to Exchange and returns an NDR. The expected NDR message reads as follows:

"Notes encrypted message delivery is not permitted for Outlook recipients. Your message has not been sent to migrated users. Please contact the HelpDesk for further information regarding email options during our migration to Outlook."

This parameter is disabled by default. Set =1 to enable.

> **NOTE!** If you enable this, the On-the fly encryption and BTZapp processing of encrypted messages will be disabled.

This can be customized in the notes.in by setting BTNDR54.

Sample screenshot:

Delivery Failure Report

Your message: Test 0901: Encrypted Mail 1b
was not delivered to: Notes9 User1/CMTU

because: "An encrypted message is not allowed to be sent to Exchange. Please resend the message without encryption."

What should you do?

- You can resend the undeliverable document to the recipients listed above by choosing the Resend button or the Resend command on the Actions menu.
- Once you have resent the document you may delete this Delivery Failure Report.
- If resending the document is not successful you will receive a new failure report.
- Unless you receive other Delivery Failure Reports, the document was successfully delivered to all other recipients.

▼ Routing path

w28dom9mail/CMTU, w16dom9coex/CMTU, w16dom9coex/CMTU, w28dom9mail/CMTU

To: Renée 张伟介人/Exchange@BTEX
cc:
Date: 11:02:16 AM Today
Subject: Test 0901: Encrypted Mail 1b
this email is encrypted

Notes.ini parameters:
BTENCRYPTDECRYPT = 0
BTZAPPSUPPORT = 0
BTZAPPCHECKENCRYPT = 0
BTBLOCKNOTESENCRYPTED=Y

Appendix E: High Availability/Redundancy Mail and Calendar Routing for Foreign Domains

The Domino Router Task

The router task loads the Foreign Domain documents into the routing table based on the latest modified to earliest modified order, which most likely will NOT reflect the order found in Domains view of the Domino directory. When a Domino mail server attempts to route mail to a Foreign Domain, the router checks the routing table for the server hosting the Foreign Domain, then checks connection points for routing to that Domino server. In the event of a flat Notes Named Network, if the Domino server hosting the Foreign Domain is not reachable via NRPC, then the router will attempt to connect to the next in order. In a structured Notes Named Network, the server with the 'last hop' to the Domino server hosting the Foreign Domain will use multiple documents as described above. The Domino router task delivers 'calendar' related routable documents to the Domino server listed on the Calendar Server tab, not to the server listed on the Mail Server tab.

The Domino CalConn Task

The calendar connector task is not quite as intelligent as the router task. The calendar connector task connects directly to the Domino server hosting the Foreign Domain. The calendar connector task will use the same order described above, the latest document modified first in order to the earliest modified document. The calendar connector task does not 'relay' requests like the router task. This is important to note in order to implement high availability for free busy requests to a Foreign Domain. The calendar connector task will throw the following _informational warning_ to the console when multiple Foreign Domain documents are used in the environment every time a free busy request is made:

Warning: Multiple documents detected for domain 'BTEx' in Domino Directory for the scheduling request.

Defining Highly Available Services

Simple method for Highly Available Mail Routing

Create more than one coexistence server with identical configurations. Create multiple Foreign Domain documents and list a different Coexistence server on the Mail Server and Calendar Server tabs. The following behavior will occur.

Primary Server (last document modified):DominoA (Mail) DominoA (Calendar)

Secondary Server: DominoB (Mail) DominoB (Calendar)

All mail routing is sent is DominoA including all routable calendar forms. All free busy requests flow to DominoA. Messages are routed to Exchange by SMTP and HTTP.

When DominoA is no longer reachable via NRPC (the server must be down and not reachable, not just busy) mail is routed to DominoB. Calendar related routable messages will also be routed to DominoB. All free busy requests will flow to DominoB. Mail items and routable calendar items are routed to Exchange by SMTP. All free busy requests fail at the calendar connector.

This is due to the calendar connector task on the second Coexistence server sees that DominoA is the first loaded calendar server in the calendaring table and that server is not reachable. The calendar connector task does not 'relay' to any other servers and does not recognize that it too is defined to handle these requests.

Making Free Busy Highly Available

Using the same scenario above, a Servers Only group is created containing all mail and application servers in the organization. A Domino administrators group should also already exist. On each of the Foreign Domain documents security is enabled (creating a readers field), giving access to the Servers Only group, administration group and the individual Coexistence server. This translates into all Domino servers, excluding the Coexistence servers, are able to see both Foreign Domain documents as well as the administrators of the environmentEach coexistence server, however, will only be able to see and load the Foreign Domino document specific to itself. An additional step is required for this to function correctly. There is a field on the Foreign Domain document called 'DocumentAccess' that is a 'readers' field and contains a role that is commonly given to the group 'LocalDomainServers'. This field must be programmatically removed. If the Foreign Domain document is ever edited this field will be added back onto the document. Appendix A contains a LotusScript agent that can be used for removing this field.

Regional Routing

Using the above method described, using Servers Only groups and multiple coexistence servers and multiple Foreign Domain Documents with reader security access set it is possible to create a regional routing topology that is highly available for both mail routing and free busy services.

Example of how to paste in the Foreign Domain Documents

This example has 6 Domino Integration for Notes server. Sample Excel sheet is included

Server	Server Data Center Location	Readers fields	Domain	Pritority	Copy Order
Cat-coex02	MT	BTCoexClusterAD	MSO365	6	1
Cat-coex04	MT	BTCoexClusterAD	MSO365	5	2
Cat-coex06	MT	BTCoexClusterAD	MSO365	4	3
Cat-coex05	AD	BTCoexClusterAD	MSO365	3	4
Cat-coex03	AD	BTCoexClusterAD	MSO365	2	5
Cat-coex01	AD	BTCoexClusterAD	MSO365	1	6
Cat-coex01	AD	BTCoexClusterMT	MSO365	6	1
Cat-coex03	AD	BTCoexClusterMT	MSO365	5	2
Cat-coex05	AD	BTCoexClusterMT	MSO365	4	3
Cat-coex06	MT	BTCoexClusterMT	MSO365	3	4
Cat-coex04	MT	BTCoexClusterMT	MSO365	2	5
Cat-coex02	MT	BTCoexClusterMT	MSO365	1	6
Cat-coex05	AD	Cat-coex05	MSO365		1
Cat-coex03	AD	Cat-coex03	MSO365		1
Cat-coex01	AD	Cat-coex01	MSO365		1
Cat-coex06	MT	Cat-coex06	MSO365		1
Cat-coex04	MT	Cat-coex04	MSO365		1
Cat-coex02	MT	Cat-coex02	MSO365		1

Agent to Remove Document Access Field

This agent can be run from any Notes application. Agent can be run from Action Menu List or Agent list selection and the Target is set to None. Contact Support to request the 'Agent to Remove DocumentAccess field' document.

Appendix F: Notes.ini Parameter Descriptions

This section contains a list of variables that are used in the INI file which was configured in Section 11: Modify the Notes.ini File. They are divided into two subjects:

1. Domino Mail Routing to Exchange

2. Processing Meetings between Exchange and Domino

> **NOTE!** For all the configurable parameters that accept True/False, it is acceptable to specify 1 or Y for True and 0 or N for False.

Domino Mail Routing to Exchange

BTEXCHANGEDOMAIN

Accepted Value: *<domain name>*

Default: Required

This parameter specifies the Foreign Domain associated with BTCal. It must match the Domain value in the Foreign Domain Document set up in Domino Directory. This parameter must be specified; if it is not found, BTCal will terminate.

Using the example above, NOTES.INI would be configured as follows:

> BTEXCHANGEDOMAIN=Exchange

> **NOTE!** The value of this parameter should be similar to the value of the Notes Domain to enhance the transparency of transitioning users from Domino to Exchange.

BTALTEXCHANGEDOMAINS

Accepted Value: <comma-separated domain names>

Default: None

This parameter specifies additional (alternate) Foreign Domains associated with BTCal. This parameter is optional, and if specified, the value(s) must match the Domain value in the Foreign Domain Document(s) set up in Domino Directory.

Using the example above, NOTES.INI would be configured as follows:

> BTALTEXCHANGEDOMAINs=Exchange-1

> **NOTE!** If the recipient address does not contain a domain specified by either BTEXCHANGEDOMAIN or BTALTEXCHANGEDOMAINS, then a Non-Delivery Report (NDR) is returned to the originator.

BTEXCHANGEDB

Accepted Value: *<mailbox name>*

Default: Required

This parameter specifies the Foreign Domain mailbox associated with BTCal. It must match the Gateway Mail File Name on the Mail Information tab and Calendar System on the Calendar Information tab in the Foreign Domain Document set up in Domino Directory. This parameter must be specified; if it is not found, BTCal will terminate.

The BTEXCHANGEDB database must be created on the Domino Coexistence Server using the Mail Router template. The Domino Server must have Manager Access to this database; it is recommended that the Default access be set as Manager.

Using the example above, NOTES.INI would be configured as follows:

> BTEXCHANGEDB=otherexchange.box

BTRECIPCONVERTFIELD

Accepted Value: shortname/internetaddress-local/internetaddress-full

Default: shortname

This parameter defines which Domino Directory field is used for generating SMTP address for recipients of mail items from Domino to Exchange. Based on the value of the field, the SMTP address for each recipient is generated as follows:

Each Recipient value is matched against all Domino Directories defined by Directory Cascading or Directory Assistance. If a unique match is not found, an NDR is generated and sent to the originator.

If the value of the BTRECIPCONVERTFIELD parameter is shortname or the field is not present in NOTES.INI, the first value of the ShortName field of the matched Domino Directory Entry is used. If the value represents a valid SMTP address, then it will be used as the new recipient value; otherwise, the value will be appended with "@" + <BTEXCHANGESERVER> (see below).

If the value of the BTRECIPCONVERTFIELD parameter is internetaddress-local, the value of the InternetAddress field of the matched Domino Directory Entry is used. The string to the left of the "@" sign will be appended with "@" + <BTEXCHANGESERVER>.

If the value of the BTRECIPCONVERTFIELD parameter is internetaddress-full, the value of the InternetAddress field of the matched Domino Directory Entry is used as the new recipient value.

If the value of the field is internetaddress-full or internetaddress-local and InternetAddress is blank, it is treated as an invalid recipient address.

The BTRECIPCONVERTFIELD parameter setting applies to all mail items and is always used for Person objects unless one or more of the following parameters is set:

- BTRECIPCONVERTFIELDMI – Mail-In Databases

- BTRECIPCONVERTFIELDRR – Rooms and Resources

- BTRECIPCONVERTFIELDGR - Groups

NOTE!
The internet address-full option must be used very carefully due to possible looping dangers. This option is only practical when the SMTP domain(s) of the Domino environment are different from that of the Exchange environment.

Domino does not apply a ShortName field to Mail-In Databases, Rooms/Resources or

Groups by default. internetAddress-local should be used for these object types and must be unique in the target mail system for the Internet Domain used for forwarding unless the Domino Directory is customized to have a ShortName on these object types.

BTRECIPCONVERTFIELDMI

Accepted Value: shortname/internetaddress-local/internetaddress-full

Default: None, this option is not used unless it is set

This parameter defines which Domino Directory field is used for generating SMTP address for recipients of Mail-In Databases from Domino to Exchange. Based on the value of the field, the SMTP address for each recipient is generated as follows:

Each Recipient value is matched against all Domino Directories defined by Directory Cascading or Directory Assistance. If a unique match is not found, an NDR is generated and sent to the originator.

If the value of the BTRECIPCONVERTFIELDMI parameter is shortname or the field is not present in NOTES.INI, the first value of the ShortName field of the matched Domino Directory Entry is used. If the value represents a valid SMTP address, then it will be used as the new recipient value; otherwise, the value will be appended with "@" + <BTEXCHANGESERVER> (see below).

If the value of the BTRECIPCONVERTFIELDMI parameter is internetaddress-local, the value of the InternetAddress field of the matched Domino Directory Entry is used. The string to the left of the "@" sign will be appended with "@" + <BTEXCHANGESERVER>.

If the value of the BTRECIPCONVERTFIELDMI parameter is internetaddress-full, the value of the InternetAddress field of the matched Domino Directory Entry is used as the new recipient value.

If the value of the field is internetaddress-full or internetaddress-local and InternetAddress is blank, it is treated as an invalid recipient address.

The BTRECIPCONVERTFIELD parameter setting applies to Mail-In Databases if the BTRECIPCONVERTFIELDMI parameter is not set.

NOTE ! The internet address-full option must be used very carefully due to possible looping dangers. This option is only practical when the SMTP domain(s) of the Domino environment are different from that of the Exchange environment.

BTRECIPCONVERTFIELDRR

Accepted Value: shortname/internetaddress-local/internetaddress-full

Default: None, this option is not used unless it is set

This parameter defines which Domino Directory field is used for generating SMTP address for recipients of Rooms and Resources from Domino to Exchange. Based on the value of the field, the SMTP address for each recipient is generated as follows:

Each Recipient value is matched against all Domino Directories defined by Directory Cascading or Directory Assistance. If a unique match is not found, an NDR is generated and sent to the originator.

If the value of the BTRECIPCONVERTFIELDRR parameter is shortname or the field is not present in NOTES.INI, the first value of the ShortName field of the matched Domino Directory Entry is used. If the value represents a valid SMTP address, then it will be used as the new recipient value; otherwise, the

value will be appended with "@" + <BTEXCHANGESERVER> (see below).

If the value of the BTRECIPCONVERTFIELDRR parameter is internetaddress-local, the value of the InternetAddress field of the matched Domino Directory Entry is used. The string to the left of the "@" sign will be appended with "@" + <BTEXCHANGESERVER>.

If the value of the BTRECIPCONVERTFIELDRR parameter is internetaddress-full, the value of the InternetAddress field of the matched Domino Directory Entry is used as the new recipient value.

If the value of the field is internetaddress-full or internetaddress-local and InternetAddress is blank, it is treated as an invalid recipient address.

The BTRECIPCONVERTFIELD parameter setting applies to Rooms and Resources if the BTRECIPCONVERTFIELDRR parameter is not set.

NOTE! The internet address-full option must be used very carefully due to possible looping dangers. This option is only practical when the SMTP domain(s) of the Domino environment are different from that of the Exchange environment.

BTRECIPCONVERTFIELDGR

Accepted Value: shortname/internetaddress-local/internetaddress-full

Default: None, this option is not used unless it is set

This parameter defines which Domino Directory field is used for generating SMTP address for recipients of Groups from Domino to Exchange. This is only used if groups are not set to be expanded for the group membership forwarding to be used (e.g. BTEXPANDMAILGROUPS=N is set).

Based on the value of the field, the SMTP address for each recipient is generated as follows:

Each Recipient value is matched against all Domino Directories defined by Directory Cascading or Directory Assistance. If a unique match is not found, an NDR is generated and sent to the originator.

If the value of the BTRECIPCONVERTFIELDGR parameter is shortname or the field is not present in NOTES.INI, the first value of the ShortName field of the matched Domino Directory Entry is used. If the value represents a valid SMTP address, then it will be used as the new recipient value; otherwise, the value will be appended with "@" + <BTEXCHANGESERVER> (see below).

If the value of the BTRECIPCONVERTFIELDGR parameter is internetaddress-local, the value of the InternetAddress field of the matched Domino Directory Entry is used. The string to the left of the "@" sign will be appended with "@" + <BTEXCHANGESERVER>.

If the value of the BTRECIPCONVERTFIELDGR parameter is internetaddress-full, the value of the InternetAddress field of the matched Domino Directory Entry is used as the new recipient value.

If the value of the field is internetaddress-full or internetaddress-local and InternetAddress is blank, it is treated as an invalid recipient address.

The BTRECIPCONVERTFIELD parameter setting applies to Groups if the BTRECIPCONVERTFIELDGR parameter is not set.

NOTE! The internet address-full option must be used very carefully due to possible looping dangers. This option is only practical when the SMTP domain(s) of the Domino environment are different from that of the Exchange environment.

Domino Security and Multi-Purpose Groups cannot have a ShortName applied as this will prevent Domino from performing ACL lookups. For these group types Interentaddress-local is recommended but must be unique in the target mail system for the Internet Domain used for forwarding.

BTEXCHANGESERVER

Accepted Value: *<SMTP address>*

Default: Required

This parameter specifies the value in the Foreign SMTP Domain document and Connection Document defined in the Domino Directory.

NOTE ! The first token in the route cannot match the Foreign Domain value defined above.

Using the example above, NOTES.INI would be configured as follows:

> BTEXCHANGESERVER=exchange1.binarytree.com

BTPROCESSDOMAIN

Accepted Value: <SMTP address1, SMTP address2,……,SMTP address15>

Default: Required

 OR

BTPROCESSDOMAIN1

Accepted Value: <SMTP address1, SMTP address2,……,SMTP address15>

BTPROCESSDOMAIN2

Accepted Value: <SMTP address1, SMTP address2,……,SMTP address15>

This parameter contains a list of SMTP domains representing true Internet addresses of Exchange users as well as direct SMTP routes from Exchange to Domino and from Domino to Exchange. This is the only parameter used by BTEx module to determine whether to translate the From:, To:, Cc:, or Bcc: values from SMTP to Notes format for e-mails from Exchange to Domino. It is important to ask the customer about all the domain names being used in their environment and ensure that those names are listed in this field. Issues with names not being properly converted from SMTP format are most likely due to a domain not being listed in this parameter.

- BTPROCESSDOMAIN, without a trailing number, can be used for a single line of domains.
- Only 15 domains are supported using this method
- Each line in the NOTES.INI file is limited to 216 characters.
- Multiple BTPROCESSDOMAINx lines can be defined (i.e. BTPROCESSDOMAIN1=… BTPROCESSDOMAIN2=…):
- If more than 15 domains are required or;
- If all 15 domains cannot fit on a single 216 character line.
- The trailing numbers must be sequential.
- Each line, except for the last, must end in a comma.

- The * character can be used to start a domain (example: *.contoso.com)

BTDELAY

Accepted Value: *<number>*

Default: 60

This parameter specifies the interval in seconds for processing Domino to Exchange messages. The recommended value is 15. The value can be set higher than 30, but any value lower than 10 will be interpreted as 10.

BTORPHANDELAY

Accepted Value: *<number>*

Default: 300

This parameter specifies the interval in seconds for processing orphaned messages (i.e., Exchange to Domino messages marked dead by BTEx) but not processed immediately by BTCal (for a number of possible reasons). The recommended value is 120. If the provided value is less than 60, it will be reset to 60. When BTExchange notification is disabled, the BTORPHANDELAY parameter can be set to a minimum of 10 seconds.

BTCALRESTARTTIMER

Accepted Value: *<number>*

Default: 0 (no restart)

This parameter indicates that the BTCal server task should restart itself every <number> minutes. Task restart may be useful to ensure that all memory segments used by a task are properly released. Recommended values for the restart interval are between 60 and 720, representing a task restart between every hour and twice a day. There is no performance impact on BTCal due to a periodic restart.

> **NOTE !**
> For this Restart Timer to work correctly, the name of the file associated with BTCal must be nBTCal.exe. If you rename it to anything else, the Restart Timer will cycle every 5 seconds attempting to restart the task.

BTRETRYLIMIT

Accepted Value: *<number>*

Default: 10

This parameter is used when inbound and outbound mail items need to be processed. When processing inbound and outbound mail items, this parameter prevents a bad message from continuously crashing BTCAL or clogging the mail flow by specifying the maximum number of times BTCAL can process the same message.

BTRETRYSENDNDR

Accepted Value: 0/1

Default: 0

If BTCal has exceeded the retry limit while processing a specific mail item, this parameter specifies whether or not an NDR will be sent to the originator of the mail item. If the parameter is set to 1, an NDR

is sent, and if it is set to 0, an NDR is not sent.

BTRETRYLIMITTEXTx

Accepted Value: *<text>*

Default: None

This parameter defines the text of the retry limit notification. There can be any number of lines of text; however, the lines must be sequentially numbered starting with 1 and the text of each line cannot exceed 216 characters. When the notice text is created, the contents of lines are scanned as a single string with no implied line ends. Line ends are defined by the string \n in the text of any line. The string "\t" defines a tab.

NOTE!	Because NOTES.INI parameters cannot have leading or trailing spaces, each BTRETRYLIMITTEXTx line must begin and end with a non-blank character.

For example:

- BTRETRYLIMITTEXT1=Dear User\n\n\tYour message or calendar entry cannot be delivered to its intended recipient
- BTRETRYLIMITTEXT 2=s.\n\nPlease contact your e-mail administrator for further assistance.

Translates as follows:

Dear User

> *Your message or calendar entry cannot be delivered to its intended recipients.*
>
> *Please contact your e-mail administrator for further assistance.*

BTBCCSKIPADDRESS

Accepted Value: *<SMTP address>*

Default: None

This parameter allows BTCal to coexist with an archiving solution – Ascentor – implemented using a similar approach and architecture in message processing as BTCal.

Ascentor marks every message with fields $Processed and $ProcessedID to indicate that it has already processed the message and adds a Bcc SMTP recipient to force a copy of a message to be directed to a specific mailbox via the SMTP address. Without this parameter, BTCal will stop processing an item if it encounters fields $Processed and $ProcessedID. With this parameter defined, BTCal will check if an item with fields $Processed and $ProcessedID has a Bcc recipient whose address matches the value specified in the configuration. If such a recipient is found, BTCal will continue processing the item assuming that it has the fields $Processed and $ProcessedID because of prior processing by Ascentor. If such a recipient is not found, BTCal will stop processing the item assuming that it has the fields $Processed and $ProcessedID because of prior processing by BTCal.

BTSUPPORTMULTIPLEDOMINODOMAINS

Accepted Value: 0/1

Default: 0

When processing a mail item from Domino to Exchange, BTCal typically removes the FromDomain field from the mail item. If there are multiple Domino Domains, this can cause problems processing replies from Exchange to Notes originally sent from downstream Domains. This parameter specifies whether BTCal should process the FromDomain field to avoid this issue. If BTSUPPORTMULTIPLEDOMINODOMAINS is set to 1, BTCal will examine the FromDomain and determine if the value contains "@" signs. If it does, the FromDomain value is replaced with the value to the left of the first @ sign. If it does not, the FromDomain field is left alone.

BTWORKDIRECTORY

Accepted Value: <Windows path name>

Default: Windows temp directory

This parameter defines the directory to which temporary work files used by BTCal will be written. It expects a properly formatted windows path name (e.g., c:\CMTc\work). If the specified directory does not exist, BTCal will attempt to create the directory. If this directory cannot be found or created, or if this parameter is not specified, work files will be written to the Windows temp directory.

BTTRUNCATESUBJECT

Accepted Value: Y/N

Default: N

The parameter accepts a value of Y and N. When set to Y, BTCal truncates the subjects of all messages sent from Notes to Exchange at 255 characters if the subject length is greater than 255 characters. There are times when Outlook will not correctly handle messages whose Subject is greater than 2K, so this parameter can be used to avoid these issues.

BTEXPANDCALGROUPS

Accepted Value: Y/N

Default: N

This parameter accepts a value of Y or N. If BTEPANDCALGROUPS is set to Y, the recipient list on inbound calendar mail items will be checked and expanded if it contains a Domino group name; otherwise, the group name will be passed in untouched.

If you have Domino group names that contain Exchange users, BTEXPANDCALGROUPS should be set to Y. This will ensure that inbound calendar mail items are correctly processed by BTCal for any Exchange recipients. If you do not have Domino groups, or your Domino groups do not contain any Exchange users, you should set this parameter to N.

BTEXPANDMAILGROUPS

Accepted Value: Y/N

Default: N

This parameter accepts a value of Y or N. If BTEXPANDMAILGROUPS is set to Y, the recipient list on inbound non-calendar mail items will be checked and expanded if it contains a Domino group name; otherwise, the group name will be passed in untouched. There is no recommended setting for this parameter.

BTEXPANDGROUPS

Accepted Value: Y/N

Default: N

This parameter accepts a value of Y or N. If an Outlook user sends an invitation to a group defined in Domino that contains Exchange users, the group name must be expanded by BTCal for calendar processing to work correctly. If you are using Domino groups that contain Exchange users, you should set this parameter to Y; otherwise, this parameter will be ignored.

NOTE!	• Integration for Notes now expands nested groups.
	• If there is an error in expanding groups (e.g., the expanded group would exceed 64K), an NDR is returned to the Outlook user.
	• There is a 64k limit on expanded Distribution Lists (nested groups) imposed by Domino.
	• BTEXPANDGROUPS has been deprecated in Release 3.1 and is superseded by the two new parameters: BTEXPANDCALGROUPS and BTEXPANDMAILGROUPS. The settings of these new parameters override the setting of BTEXPANDGROUPS if it is found in your NOTES.INI file. We recommended that you delete BTEXPANDGROUPS from your NOTES.INI file if it was previously configured.

BTEXPANDGROUPSDOMAIN

Accepted Value: <string>

Default: None

There are times when the domain name defined for Domino groups in Exchange may be different from the domain name defined for associated groups in Domino. For example, the SMTP address in Exchange may be *TestGroup@notes.dev.com*, but the Internet address in the NAB could be *TestGroup@notes.com*. **BTEXPANDGROUPSDOMAIN** takes a string-value and is configured with the domain name that will be used for matching the groups. For example, set BTEXPANDGROUPSDOMAIN to **notes.com** in the above scenario.

BTCal will first try to find a match using *TestGroup@notes.dev.com*. If it is not found, and BTEXPANDGROUPSDOMAIN is defined, BTCal would replace the domain name and try to match it with *TestGroup@notes.com* and will succeed.

NOTE!	BTEXPANDGROUPSDOMAIN only supports one domain.

BTFORCELOCATIONRESOLUTION

Accepted Value: 0/1

Default: 0

When enabled (parameter set to 1), BTCal will look at each attendee in the Exchange ICAL stream and attempt to resolve it to a Domino room/resource. If the attendee is found to be a Domino room/resource, the display name will be added to the LOCATION value in the ICAL. This allows BTCAL and Domino to recognize the room/resource properly so that cancellations and updates are properly applied. This should be enabled for Exchange 2013 or higher. Exchange 2007 and 2010 handle this correctly already.

BTSENDEXPANDED

Accepted Value: Y/N

Default: Y

This parameter accepts a value of Y or N, and is only used if BTEXPANDCALGROUPS=Y. When set to Y, BTCal will send reschedule/cancellation notices to Exchange users after expanding the group. If the messages are sent, this will result in duplicate e-mails for Exchange users. If the messages are not sent, you run the risk of Exchange users not receiving reschedule/cancellation notices if they have not yet accepted the original invitation. Note that the original invitation is always sent to Exchange users, regardless of the setting of this parameter.

NOTE ! The setting of BTEXPANDMAILGROUPS has no effect on this parameter.

BTCHECKINTERNALSMTP

Accepted Value: 0/1

Default: 0

and

BTINTERNALSMTPDOMAIN

Accepted Value: <SMTP domain1,SMTP domain2>

Default: none

This parameter allows an O365 customer, who is gradually transitioning users from Domino to O365, to process all inbound external mail originating from O365, while letting other externally originated mail flow through untouched.

BTCHECKINTERNALSMTP accepts a value of 0/1, with the default being 0. To enable O365 compatibility, you should set BTCheckInternalSMTP=1.

BTInternalSMTPDomain accepts a comma separated list of SMTP domains, with no default. If O365 compatibility is enabled (i.e., BTCheckInternalSMTP=1), BTEx will compare the originator address of all inbound mail items against the list of configured internal SMTP domains. If a match is not found, the mail item is passed through unchanged. This also means that no address translation is done.

BTCONVERTPNG

Accepted Value: 0/1

Default: 0

BTCONVERTPNG accepts a value of 0/1, with the default being 0. When the parameter is set to 0, inline PNG images are not looked for and the BTPNG field is not set for BTCal if PNG images are found. When it is set to 1, PNG images are looked for and BTPNG field is set if images are found.

BTCONVERTPROPOSE

Accepted Value: 0/1

Default: 0

For on-prem installations only. Not for use for hybrid or O365 deployments.

The BTCONVERTPROPOSE parameter can be used to prevent the message, which is sent by a Notes user to propose a new time for a meeting that originated in Outlook, from always converting to a text message. The parameter allows BTCal to either convert the message to a text message or let it flow through as a counter proposal.

BTCONVERTPROPOSE accepts a value of 0/1, with the default being 0. When the parameter is set to 0, proposals for SINGLE meetings will be sent to Outlook as calendar counter proposals. When it is set to 1, proposals will be converted to text messages.

NOTE !

- Proposals for entire series are ALWAYS converted to text messages, regardless of the setting of BTCONVERTPROPOSE. In addition, regardless of the setting of BTCONVERTPROPOSE, BTCal will insert text in the mail item that will be displayed by Outlook to the Outlook user. This text will specify the original date/time of the meeting, and the proposed date/time.
- When an Outlook invitee declines a meeting request that originated in Notes and proposes a new date/time for the meeting, then message received by the Notes user comes as a counter proposal. If the Notes user declines it, the Notes message is changed to a Meeting Confirmation (NoticeType=N) and the subject is prefixed with **Counter Proposal Declined** and sent to the Outlook user.
- Counter proposals from Notes users to O365 chairs are not supported.

BTOUTMESSAGEMAX

Accepted Value: 0/<any number greater than 0>

Default: 100

And

BTINMESSAGEMAX

Accepted Value: 0/<any number greater than 0>

Default: 100

BTOUTMESSAGEMAX and **BTINMESSAGEMAX** allow you to specify the maximum number of messages that you want BTCal to process in a mailbox before it switches to the next mailbox.

- The **BTOUTMESSAGEMAX** parameter defines the maximum number of messages that should be processed from the mailboxes defined in BTEXCHANGEDB for Outbound SMTP traffic to Exchange.
- The **BTINMESSAGEMAX** parameter defines the maximum number of messages that should be processed from the mail.boxes (mail1.box, mail2.box, etc.) for Inbound SMTP traffic to Notes/Domino.

The default for both parameters is 100, and when you specify zero (0) for either of the parameters, this indicates to BTCal that there is no maximum limit specified and it should process all of the messages in the mailbox before switching to another mailbox.

BTONLINEMEETINGLABEL

Accepted Value: *<text>*

Default: None

If an online meeting invitation is being sent from Notes to Outlook, and it contains an APPTUNIDURL, the BTOnlineMeetingLabel parameter can be configured to add the specified label and URL in front of the body of the notice.

It can be used as BTOnlineMeetingLabel1 and BTOnlineMeetingLabel2 and has a maximum size of 8K characters.

BTNOTIFYONDELEGATEORCOUNTER

Accepted Value: 0/1

Default: 0

When enabled (parameter set to 1), BTCal will send the following NDR's when the Prevent Delegation or the Prevent Counter-Proposals is enabled:

- Prevent Delegation enabled - BTNDR43 ="This meeting has "Prevent delegating" enabled. This functionality is not supported for Outlook participants."

- Prevent Counter-Proposals enabled - BTNDR44="This meeting has "Prevent counter-proposing" enabled. This functionality is not supported for Outlook participants."

- Prevent Delegation enabled and Prevent Counter-Proposals enabled - BTNDR45="This meeting has "Prevent delegating" and "Prevent counter-proposing" enabled. This functionality is not supported for Outlook participants."

- Default text for the notify body - BTNDR46="Dear User,\r\n\r\nWhile this invitation will be delivered, it contains functionality not supported between Notes and Outlook:\r\n\r\n\t%REASON%\r\n\r\n***Your invitation information:\r\n\tSubject: %SUBJECT%\r\n\tLocation: %LOCATION%\r\n\tDate: %DATE%\r\n\r\nThe affected recipient(s):\r\n%RECIPIENTS%"

Please refer to Appendix K: Cross Platform Delegation to determine which option is appropriate for your environment and user community.

BTSUBJECTPREFIXMARKER

Accepted Value: markers separated by a comma.

Default: none (disabled by default)

When Notes sends meeting-related messages to Outlook, it prepends various strings to the meeting title, making the actual meeting title difficult to view on mobile device calendar views. This parameter allows for prepended text such as "Updated: " and "Rescheduled: " to be removed by looking for the pattern at the end of the prepended text (the marker). Removing the prepended text allows users to more easily see meeting titles on mobile device calendar views. When a meeting title with prepended text contains one of the markers from the list, all the text preceding the marker and the marker itself will be removed from the meeting title.

- Use a trailing comma to avoid Notes stripping trailing spaces from the marker. For example, BTSubjectPrefixMarker=: , means BTCal will look for the string ": " in the meeting title.
- Commas as part of a marker can be escaped with a backslash (\,).
- Backslashes as part of a marker can be doubled (\\).
- Characters with diacritics (é, ü, etc.) are supported, but NOTES.INI must be in UTF-8 format without a BOM. Notepad++ is the recommended tool for saving in this format. UTF-8 format that includes the BOM, or byte order mark cannot be read.

BTSUBJECTPREFIXEXCLUSION

Accepted Value: prefixes separated by a comma.

Default: none (disabled by default)

Note, this parameter modifies the behavior of BTSUBJECTPREFIXMARKER and is only valid if BTSUBJECTPREFIXMARKER is set.

This parameter allows certain prefixes to be retained in meeting titles for messages sent from Notes and received by Outlook. When a meeting title with prepended text starts with one of the prefixes from the list, the full meeting title is left intact.

- Use a trailing comma to avoid Notes stripping trailing spaces from the marker. For example, BTSubjectPrefixExclusion=Résiliation: , means BTCal will look for the prefix "Résiliation: " in the meeting title.
- Commas as part of a prefix can be escaped with a backslash (\,).
- Backslashes as part of a prefix can be doubled (\\).
- Characters with diacritics (é, ü, etc.) are supported, but NOTES.INI must be in UTF-8 format without a BOM. Notepad++ is the recommended tool for saving in this format. UTF-8 format that includes the BOM, or byte order mark cannot be read.

The BTSUBJECTPREFIXEXCLUSION parameter supports multiple lines. If the total list of prefixes is larger than 255 characters, it can be separated across multiple BTSUBJECTPREFIXEXCLUSIONx variables. Any number of sequentially numbered BTSUBJECTPREFIXEXCLUSIONx prefixes can be defined, starting with BTSUBJECTPREFIXEXCLUSION1.

The following example illustrates two alternatives of defining prefixes:

> BTSUBJECTPREFIXEXCLUSION=Cancelled: ,Cancelado: ,Résiliation: ,Suspender: ,

Or

BTSUBJECTPREFIXEXCLUSION1=Cancelled: ,Cancelado: ,

BTSUBJECTPREFIXEXCLUSION2=Résiliation: ,Suspender: ,

BTSUBJECTPREFIXFILTERING

Accepted Value: Y/N.

Default: N (disabled by default)

With filtering disabled (BTSUBJECTPREFIXFILTERING=N), all messages from Notes to Outlook are processed if BTSUBJECTPREFIXMARKER is set. With filtering on (BTSUBJECTPREFIXFILTERING=Y), only meeting notices from Notes to Outlook that are initiated by the chairperson or someone representing the chairperson are processed if BTSUBJECTPREFIXMARKER is set.

BTEXNOTIFYBTCAL

Accepted Value: Y/N.

Default: N (disabled by default)

To prevent the Domino server from crashing under load, BTExchange notification of BTCal can be disabled with the BTEXNOTIFYBTCAL parameter.

To disable BTExchange notification of BTCal, set **BTEXNOTIFYBTCAL=N**

NOTE! When BTExchange notification is disabled, the BTORPHANDELAY parameter (the interval for processing orphaned messages) can now be set to a minimum of 10 seconds instead of the previous minimum of 60 seconds.

9.4 Handling Attachments between Domino and Exchange

Due to certain differences in processing MIME-encoded attachments by Domino and Exchange, the following Domino Server configuration variable is required:

MIMEFORCEATTACHMENTS=1

Although not specifically used by BTCal, this parameter must be set for the Domino Server to process outbound mail items with attachments properly.

BTINATTOPT

Accepted Value: 0/1

Default: 0

When Domino SMTP translates e-mails sent from Exchange to Domino into Notes documents, MIME-encoded attachments and embedded objects are represented by $FILE items. Due to certain limitations of Notes Clients prior to versions 6.x, some attachments are not properly displayed for the eventual recipients of e-mails. To ensure that $FILE items are properly displayed, BTCal detaches and re-attaches each $FILE object and, if necessary, performs additional processing of these items. This parameter specifies whether and what type of additional processing is performed by BTCal.

When BTINATTOPT is set to 0, BTCal performs no additional processing. This value should always be used for environments where all Notes Client versions are 6.x or higher.

When BTINATTOPT is set to 1, BTCal performs name-based and host-based processing of $FILE items.

A value of 1 should only be used for environments where some Notes Client versions are 5.x or lower. Additional processing of $FILE item is performed according to the following rules:

If the HOST value of the original $FILE item is not STREAM (2304), the HOST value of the re-attached $FILE object will be left unchanged.

If the HOST value of the original $FILE item is STREAM and the File Name of the $FILE item matches a pattern defined by the BTINATTSKIPNAMES parameter, the HOST value of the re-attached $FILE object will be left unchanged.

If the HOST value of the original $FILE item is STREAM and the File Name of the $FILE item does not match a pattern defined by the BTINATTSKIPNAMES parameter, the HOST value of the re-attached $FILE object will be replaced with value of UNKNOWN. This results in $FILE element always being displayed as an attachment (even if the $FILE element represents an embedded image).

BTINATTSKIPNAMES

Accepted Value: <comma separated filename patterns>

Default: None

This parameter specifies a multi-valued field with values separated by commas that represent various file name patterns, against which File Name values of $FILE items may be compared (see rules defined above). The following syntax rules should be used when constructing values for this parameter:

(asterisk) represents string of any length or value.

(number sign) represents a single digit.

*<string> matches a file name of any length ending in <string> (case and extension insensitive). For example, file name test document.doc matches value *document.

<string>* matches a file name of any length starting with <string> (case and extension insensitive). For example, file name test document.doc matches value test*.

<string>### matches a file name starting with <string> followed by 3 digits (case and extension insensitive). For example, file name image123.bmp matches value image###; however, file names image1x3.bmp or image12.jpg do not match value image###.

The recommended value is image###, since embedded images in Outlook are given "virtual file names of imageNNN.<extension>. For example, image001.bmp, image002.jpg, image003.tif.

BTBLOCKCANCELNOCACHE

Accepted Value: Y/N

Default: Y

This parameter determines what happens when a meeting chaired in Notes and sent to an Outlook user is cancelled and there is no cache document which results in no NDR and no cancellation notice by default. If the BTBlockCancelNoCache parameter is set to "Y", "Cancel Single Occurrence" will not be delivered. If the BTBlockCancelNoCache parameter is set to "N", the cancel will be delivered. "Cancel All Occurrences" is needed for the chair to cancel and recreate the meeting and will be delivered regardless of the BTBlockCancelNoCache parameter setting.

BTPRESERVEATTACHMENTS

Accepted Value: 0/1

Default: 1

This parameter preserves the attachments added during an update of a Notes repeating meeting sent to Outlook attendees. When enabled (parameter set to 1), BTCal will not remove the attachments added during an update to a repeating meeting in Notes and sent to Outlook attendees. This parameter resolved a defect that was incorrectly removing attachments during meeting updates, and should always be enabled. It is Binary Tree's practice to use ini parameters to correct this type of issue to protect the previous behavior in the event an existing deployment is dependant on it.

Processing Meetings between Exchange and Domino
BTKEEPPOSTED

Accepted Value: Y/N

Default: Y

If BTKEEPPOSTED is set to Y or if it is not present in the NOTES.INI file, BTCal inserts the **KeepPosted** text field in the meeting response. If the **KeepPosted** text field is present in the decline response you sent to a meeting, and the meeting is updated, Domino will send you the update even though you declined the original invitation. This may be useful in the case where an Exchange user could not attend the meeting at its originally scheduled time but can attend at the rescheduled time. Also, if the meeting is canceled, the cancellation notice is sent to the Exchange user if **KeepPosted** is set.

If BTKEEPPOSTED=N, this text field is not added to the meeting response.

BTCHECKRECIPIENTS

Accepted Value: Y/N

Default: N

If BTCHECKRECIPIENTS is set to Y, BTCal searches the recipient list of all inbound calendar mail items for any Exchange users. If Exchange users are found, the original mail item is copied to a new mail item. The Exchange users are copied to the new mail item and then removed from the original mail item.

If BTCHECKRECIPIENTS = N, the recipient list is not searched for Exchange recipients.

NOTE !
This process can be time consuming, depending on the size of the recipient list. Therefore, this parameter should only be enabled if BTCal is receiving inbound mail items that contain Exchange addresses.

BTINBOUNDLOOKUPFIELDS

The BTINBOUNDLOOKUPFIELDS parameter can be added to the Notes.ini file to define field names that, if the fields exist in the Domino NAB and contain a value, will have the field values added to the Notes memo or calendar invitation during an Outlook to Notes transaction.

        BTINBOUNDLOOKUPFIELDS=FieldName1, FieldName2

9.6   Processing Repeating Meetings between Exchange and Domino

Due to significant differences in handling repeating/recurring meetings from invitations to reschedules and

updates and to cancellations by Exchange and Domino, BTCal examines such items and determines whether the opposite environment can properly handle them. If a scheduling or a rescheduling action is improperly handled, an appropriate notification is issued based on parameter values defined further in the document.

For the detailed documentation on handling various types and functions of repeating/recurring meetings by BTCal, please refer to Appendix F.

BTCACHEDB

Accepted Value: <database name>

Default: btcache.nsf

This parameter defines the database that will be used to store data required for proper processing of repeating/recurring meetings by BTCal. The database must be stored in the Domino Coexistence Server Data Directory and built from the default database received as part of the Integration for Notes Installation package.

BTRECURRENCELIMIT

Accepted Value: *<number>*

Default: 1200

With the limit being around 1200, there is an issue with the actual number of recurrence dates that Notes will accept. To avoid issues in Notes after a calendar invitation from Exchange is delivered to Domino, BTRECURRENCELIMIT should be used to specify the maximum number of recurrence dates that should process be processed. If this number is exceeded, an NDR is sent to the originator.

BTMULTISCHEDREPORTLEVEL

Accepted Value: 1/2/4

Default: 1

This parameter determines whether the notice of an inappropriate action is sent by BTCal.

1 – an error report is sent back just to the originator of the meeting

2 – an error report is sent back to the originator and specified administrator address,

which can be a group

4 – checking the validity of invitations or reschedules is disabled. (not recommended)

BTMULTISCHEDREPORTADDRESS

Accepted Value: *<SMTP address>*

Default: None

This parameter defines the value of an additional address to which notification of an inappropriate recurring meeting action is sent. The SMTP address user1@clientdomain.com is an example of the value that can be assigned to the parameter. This address can also be a group.

> **NOTE!** This parameter is only needed if BTMULTISCHEDREPORTLEVEL is set to 2.

BTMULTISCHEDREPORTADDRESSTYPE

Accepted Value: 0/1/2

Default: 0

This parameter allows the user to specify whether the configured BTMULTISCHEDREPORTADDRESS should be placed in the To, CC, or BCC field when sending a mail notification. Acceptable values are 0 (To), 1 (CC) and 2 (BCC), with the default being 0. If the parameter is not included in the NOTES.INI file or contains an unacceptable value then the address will appear in the To field as that is the default behavior.

BTMULTISCHEDREPORTTEXTx

Accepted Value: *<text>*

Default: Dear User,

The calendar pattern used in the invitation you sent is not supported at this time for the following reason:

%REASON%

Please reschedule using another pattern!

Original invitation information:

Subject: %SUBJECT%

Date: %DATE%

Integration for Notes allows the user to customize the NDR returned for invalid calendar items. The BTMULTISCHEDREPORTTEXTx parameter defines the text of the notice of the inappropriate action. Customization is based on the text configured for this parameter. There can be any number of lines of text; however, the lines must be sequentially numbered starting with 1 and the text of each line cannot exceed 216 characters. When the notice text is created, the contents of the lines are scanned as a single string with no implied line ends. Line ends are defined by the string "\n" in the text of any line. The string "\t" defines a tab.

NOTE !	Because NOTES.INI parameters cannot have leading or trailing spaces, each BTMULTISCHEDREPORTTEXTx line must begin and end with a non-blank character.

For example, you can specify the BTMULTISCHEDREPORTTEXTx parameter as follows to create a customized message for the NDR when a calendar pattern is rejected.

BTMULTISCHEDREPORTTEXT1=Dear User\n\nThe calendar pattern used in invitation you sent is not supported at this time\n

BTMULTISCHEDREPORTTEXT2=for the following reason:\n%REASON%\n

BTMULTISCHEDREPORTTEXT3=Please reschedule using another pattern!\n\n

BTMULTISCHEDREPORTTEXT4=***Your invitation information:\n

BTMULTISCHEDREPORTTEXT5=Subject: %SUBJECT%\n

BTMULTISCHEDREPORTTEXT6=Location: %LOCATION%\n

BTMULTISCHEDREPORTTEXT7=Time: %DATE%\n

BTMULTISCHEDREPORTTEXT8=Chair: %CHAIRPERSON%\n

BTMULTISCHEDREPORTTEXT9=The invitation was not sent to the following user(s):\n%RECIPIENTS%

It will translate as:

The calendar pattern used in invitation you sent is not supported at this time for the following reason:

<Reason>

Please reschedule using another pattern!

***Your invitation information:

Subject: <SUBJECT>

Location: <LOCATION>

Time: <DATE>

Chair: <CHAIRPERSON>

The invitation was not sent to the following user(s):<RECIPIENTS>

There are six keywords that can be placed anywhere in the configured text to supply additional information specific to the non-delivery report. Note that the keywords are not case-sensitive, but they MUST be enclosed in percent signs.

1.   %REASON% - Displays a textual reason why Integration for Notes is rejecting the calendar event and returning a non-delivery notification. See Appendix G for a complete list of the reasons for a failure as well as the cause of the failure.

2.   %DATE% - Displays the start date of the meeting notice in the long form, such as Monday, March 8, 2010.

3.   %SUBJECT% - Subject specified in calendar event.

4.   %LOCATION% - Location specified in the calendar event.

5.   %CHAIRPERSON% - Chairperson specified in the calendar event.

6.   %RECIPIENTS% - Comma-separated list of foreign recipients of the calendar event. For messages originating in Outlook, this keyword would refer to Notes users. For messages originating in Notes, this keyword would refer to Outlook users.

> **NOTE!** The rejection notices for unsupported meeting patterns originating in Notes display the Chairperson and Foreign Recipient addresses in **full canonical format**.

If the BTMULTISCHEDREPORTTEXTx parameter is not set in the NOTES.INI file, then the default message that appears when a calendar pattern is rejected is:

Dear User,

The calendar pattern used in the invitation you sent is not supported at this time for the following reason:

%REASON%

Please reschedule using another pattern!

Original invitation information:

Subject: %SUBJECT%

Date: %DATE%

BTNDRFROMADDRESS

Accepted Value: <email address> or <common name>

Default: None

When an email address is provided for this parameter, the From field of all NDR's will be set to the email address. This parameter will accept an SMTP name or a common name. If there is no value, the NDR will appear to come from the recipient.

BTNONDRONQUIT

Accepted Value: 0/1

Default: 0

This parameter specifies whether or not BTCal will send an NDR if it is in the middle of processing a mail item when the QUIT command is issued from the console. If BTNONDRONQUIT is set to 0, an NDR will not be sent; otherwise, an NDR will be generated and sent to the originator.

BTPARTIALTEXT

Accepted Value: <text>

Default: *Room/Resource is not available for all the dates of the requested meeting and has declined the entire series. You must use another time or find another resource. Date(s) that the room/resource were not available at the requested time are the following:*

When an Exchange user attempts to schedule a recurring meeting with a Notes Room/Resource and the Room/Resource is not available for one, multiple, or all instances of the meeting, a complete Decline is generated. This parameter allows you to customize the notification text for the Decline message. For example:

BTPartialText1=Room/Resource is not available.

BTPartialText2=You must use another time or find another resource.

There is a maximum of 1024 characters for this parameter.

BTBLOCKUPDATENOCACHE

Accepted Value: Y/N

Default: N

The default behavior of BTCal is to assume all calendar updates coming from an Exchange chair to a Domino participant where there is no information of the meeting in the BTCache database are valid and are delivered to the Domino participant. This includes reschedules, updates, and adding a Domino

participant. When this parameter is set to Y (Yes), BTCal is blocks any calendar update coming from an Exchange chair to a Domino participant where there is no information of the meeting in the BTCache database.

Updates (Exchange to Domino)

When a calendar update arrives from Exchange, BTCal first looks for the UID in the cache database. If the UID does not exist:

- If BTBlockUpdateNoCache = N

    The document is processed by BTCal and passed through to Domino. It will not be blocked based on the missing cache document.

- If BTBlockUpdateNoCache = Y

    We determine if it is a repeating meeting by looking in the iCal stream for either an RRULE: or a RECURRENCE-ID:

    If the SEQUENCE: is 0, the document is processed by BTCal and passed through to Domino. It will not be blocked based on the missing cache document.

    If the SEQUENCE: is greater than 0 but the iCal stream contains neither an RRULE: or a RECURRENCE-ID: it is a single occurrence meeting update and passed through to Domino. It will not be blocked based on the missing cache document.

    If the SEQUENCE: is greater than 0 and the iCal stream contains either an RRULE: or a RECURRENCE-ID: it is a recurring meeting update and will be stopped by BTCal. It will be blocked based on the missing cache document. This can be either an update to a single occurrence, all occurrences, or an add user.

Cancels (Domino to Exchange)

When a calendar cancel arrives from Exchange, BTCal first looks for the UID in the cache database. If the UID does not exist:

- "Cancel All Occurrences" will be delivered regardless of the BTBlockCancelNoCache INI setting. Without this, the chair cannot cancel and recreate the meeting.
- "Cancel Single Occurrence" will not be delivered by default. If the INI parameter BTBlockCancelNoCache is set to "N", the cancel will be delivered.

BTRESOLVENDRRECIPIENTS

Accepted Value: Y/N

Default: N

When enabled (parameter set to Y), the recipients list in a calendar NDR is resolved from the Exchange-based SMTP addresses into a Notes name. For example, john.smith@domino.contoso.com becomes John Smith/Contoso.

BTRESOLVENDRRECIPIENTSDOMAIN

Accepted Value: <string>

Default: None

This parameter allows you to specify the SMTP domain to search if the first search fails. When BTResolveNDRRecipientsDomain=localpart, the local part of the address is used to perform lookups. If the local part is not unique across all address books, the first matching entry found will be used. When local part is used for name resolution, no secondary domain lookups are supported. If possible, the incoming SMTP address is converted to the abbreviated Notes name.

BTADDUSERDWASUPPORT

Accepted Value: Y/N

This parameter accepts a value of Y or N. It specifies whether BTCal supports the ability for a user to add an Outlook user to an existing repeating meeting via Domino Web Access (DWA). If this parameter is set to N (or not present in the NOTES.INI file), and a request to add a user comes in, an NDR is returned.

BTEXCHANGEROUTER

Accepted Value: <String>

Default: BTExchange.box

BTEXCHANGEROUTER is normally set to BTExchange.box, which is the database that the Foreign Domain database points to

BTPRIVATEHANDLEQP

Accepted Value: Y/N

Default: N

The parameter accepts a value of Y or N. It specifies whether BTCal should validate quote-printable text in URL's contained in message bodies. If enabled BTCal will not block messages with iCal streams that contain the text "=3d".

BTPRIVATEADDMISSINGROOMATTENDEE

Accepted Value: Y/N

Default: N

The parameter accepts a value of Y or N. It specifies whether BTCal should validate the attendee list on meetings from Exchange to Domino to check for Rooms that are included in the meeting. When enabled this will add the room to the ATTENDEE line if it is missing and add CUTYPE=ROOM.

Zero-Touch Application Remediation (ZApp)

ZApp is an optional (separately purchased) feature of BTCal designed to perform on-the-fly transformation of mail items sent from Domino to Exchange, which contain elements that can only be processed by a Notes Client. Such elements include Custom e-Mail Forms, Hot Spot Button, Action Pop-up, and Mouse-over Action. When these items are encountered, they require remediation. To ensure that the Notes-specific elements of these mail items are not lost in transmission from Domino to Exchange, a remediated mail item that contains custom text (defined by the BTSTORETEXT parameter) is sent to the Exchange user. The original mail item is stored in a Domino database on the Domino Coexistence Server (referred to as BTStore) and/or in a Domino database attached to the remediated message. If the original mail item is stored on the Coexistence Server, when the Exchange user receives the resulting mail item in Outlook or Outlook Web Access, the user can click on the link and access the original Notes mail item in BTStore. If the original mail item is stored in a database attached to the remediated mail item, the Exchange user can open the attached database. In either case, it is assumed the Exchange user's workstation has the Notes Client and the original Notes ID File.

Since the mail item transformation requires no action beyond original configuration, the process is referred to as Zero Touch Application Remediation. ZApp actions are defined by the following parameters:

BTZAPPSUPPORT

Accepted Value: 0/1

Default: 0

This parameter defines whether ZApp functionality is enabled and which Domino database should be used to store the original mail item.

- If BTZAPPSUPPORT is set to 0, ZApp is disabled and all subsequent ZApp parameters are ignored.
- If BTZAPPSUPPORT is set to 1, the original mail item is stored in a Domino database on the Domino Coexistence Server (defined by the BTSTOREDB parameter). If the Domino database cannot be found, BTCal will terminate.
- If BTZAPPSUPPORT is set to 2, the original mail item is stored in a Domino database that is attached to the remediated mail item. The Domino database is created based on the Domino template defined by the BTZAPPTEMPLATE parameter. If the Domino template cannot be found, BTCal will terminate.
- If BTZAPPSUPPORT is set to 3, the original mail item is stored in the BTSTOREDB on the Domino Coexistence Server as well as in a Domino database that is attached to the remediated mail item. If either the BTSTOREDB database or the BTZAPPTEMPLATE cannot be found, BTCal will terminate.

BTZAPPTEMPLATE

Accepted Value: <database name>

Default: Required if BTZAPPSUPPORT=2 or BTZAPPSUPPORT=3

This parameter defines the Domino Database template used to create the ZApp Database that is attached to the remediation messages if BTZAPPSUPPORT is set to 2 or 3. If BTZAPPSUPPORT is set to 2 or 3, and this parameter is not specified, BTCal will terminate. If BTZAPPSUPPORT is set to 2 or 3 and this BTCal cannot open the configured template, BTCal will terminate.

This template should be created by the Administrator and Binary Tree recommends using a standard mail template.

> **NOTE!** When the mail item is received in Outlook, if the Exchange user is running Exchange 2010, the user must set the message to Edit mode by clicking Actions -> Edit message before attempting to open the attached ZApp Database.

BTZAPPDB

Accepted Value: *<database name>*

Default: BTZAPP.NSF

This parameter defines the name of the Domino Database that is attached to the remediation message if BTZAPPSUPPORT is set to 2 or 3.

> **NOTE!** When the %DATETIME% keyword is included in the INI parameter BTZAPPDB, the keyword is replaced with the date and time on the CMTc server in the following format: dd-mm-yyyy_hh-mm. For example, if the parameter is BTZAPPDB=%DATETIME%_EncryptedContent.nsf, the database would receive a name like 13-02-2014_12-12_EncryptedContent.nsf.

BTSTOREDB

Accepted Value: *<database template name>*

Default: BTSTORE.NSF

This parameter defines the ZApp BTStore Domino database. The database must be stored in the Domino Coexistence Server data directory and is built from the btstore*.ntf Template received as part of the Integration for Notes Installation package. The database can be treated as any other standard Domino database, including creation of replicas, agents to manage document aging, reporting, and other activities.

BTZAPPUNIQUECOPY

Accepted Value: N/Y

Default: Y

This parameter defines how the original mail item that contains the ZApp-able items will be handled.

- If BTZAPPUNIQUECOPY is set to Y, a separate document is stored in the BTStore database for each recipient (if BTZAPPSUPPORT is 1 or 3) and a separate ZApp database is created and sent to each recipient (if BTZAPPSUPPORT is 2 or 3).

- If BTZAPPUNIQUECOPY is set to N, one document is stored in the BTStore database for all recipients (if BTZAPPSUPPORT is 1 or 3) and the same ZApp Database is sent to all recipients (if BTZAPPSUPPORT is 2 or 3).

This parameter can be used to control the size of the BTStore database effectively. Setting BTZAPPUNIQUECOPY to N significantly reduces the database; however, users can inadvertently delete common documents in the BTStore database. To avoid this, BT recommends that the ACL of the BTStore database be set up to prevent users from deleting documents. Additionally, if any documents in the BTStore database contain buttons that update fields to prevent multiple executions, their functionality can be adversely affected by this setting. Size versus functionality considerations should be carefully considered when implementing this feature.

> **NOTE!** If only one copy of the documents is stored in the BTStore database, and the same ZApp Database is sent to all recipients, then all recipients will have access to the same document. Therefore, if the original mail item contained BCC addresses, these addresses will be present for all recipients to view.

BTZAPPCHECKENCRYPT

Accepted Value: 0/1/2

Default: 1

This parameter defines whether encrypted e-mails sent from Domino to Exchange will be remediated by BTCal.

If BTZAPPCHECKENCRYPT is set to 0, for all encrypted items (e-mail or calendar entries), the user receives a message (not the calendar entry) with a notice in the body that contents are missing due to being encrypted.

If BTZAPPCHECKENCRYPT is set to 1 and the e-mail is encrypted, it will be treated as an e-mail containing Notes-specific items and will be saved in the BTStore.nsf database and a custom e-mail with a link to the saved document will be sent to the target user. If the encrypted item is a calendar entry, it is ZApped and the message is sent along with the link to the original entry, which cannot be acted upon.

If BTZAPPCHECKENCRYPT is set to 2, and the encrypted item is a calendar entry, the unremediated calendar notice is stored in the Btstore.nsf database, a message (similar to BTZAPPCHECKENCRYPT=1) is delivered to the Outlook user, and a calendar notification is delivered to the Outlook user.

> **NOTE!** Messages are processed by the On the Fly Decryption and Encryption feature before being processed by the ZApp feature. See Appendix J for more information about the On the Fly Decryption and Encryption feature.

BTZAPPCOMBINEENCRYPTEDCALENDAR

Accepted Value: 0/1

Default: 1

This parameter defines whether the ZApp notice is placed in the body of the meeting notice.

If BTZAPPCOMBINEENCRYPTEDCALENDAR is set to 0 the ZApp notice is not placed in the bocy of the meeting.

If BTZAPPCOMBINEENCRYPTEDCALENDAR is set to 1 the ZApp notice is placed in the body of the meeting notice. The standard ZApp text is used in place of the encrypted text.

BTZAPPENCRYPTTEXT

Accepted Value: *<text>*

Default: *Contents of this document are encrypted with a Notes certificate and cannot be read.*

This parameter provides the message text for calendar notices. This parameter can be specified as just BTZAPPENCRYPTTEXT or as a multi-line value (BTZAPPENCRYPTTEXT1, BTZAPPENCRYPTTEXT2).

The maximum number of characters that can be specified in the parameter is 255. If

BTZAPPENCRYPTTEXT is not configured, then the following default text is used:

Contents of this document are encrypted with a Notes certificate and cannot be read.

BTZAPPBYPASS

Accepted Value: 0/1

Default: 0

This parameter defines whether the presence of a $BTZAppBypass field in an e-mail will cause BTCal to not examine the e-mail for the purposes of remediation regardless of its contents. Encrypted e-mails sent from Domino to Exchange will be remediated by BTCal. If BTZAPPBYPASS is set to 1 and the e-mail contains a field $BTZAppBypass that equals to 1, the e-mail will be ignored by the remediation process; otherwise, the presence of a $BTZAppBypass field will not be checked.

BTZAPPBYPASSDOCSWITHFIELDS

Accepted Value: <comma separated list of field names>

Default: None

This parameter defines a list of fields, the presence of which in any mail item will force document remediation to be skipped. This is a multi-valued case-insensitive parameter.

BTZAPPIGNORESTOREDFORMS

Accepted Value: 0/1

Default: 0

This parameter defines whether the presence of a stored form in a mail item will force or skip remediation regardless of its contents. If (mail item's Form is blank or no form is present) and (mail item has fields $Body_StoredForm or $Fields_StoredForm or $TITLE_StoredForm or $Info_StoredForm) it is considered to have a stored form.

- BTZAPPIGNORESTOREDFORMS=1 will cause remediation to be skipped while,
- BTZAPPIGNORESTOREDFORMS=0 will cause remediation to be performed

BTZAPPINCLUDEFULLDISTRIBUTION

Accepted Value: 0/1

Default: 0

This parameter defines whether to maintain the email's original SendTo, CopyTo, and BlindCopyTo values. If the original SendTo, CopyTo, and BlindCopyTo values are maintained, Outlook recipients of Zapped items will only see other Outlook recipients in the TO and CC fields, not the Notes recipients.

If BTZAPPINCLUDEFULLDISTRIBUTION is set to 0 the email's original SendTo, CopyTo, and BlindCopyTo values will not be maintained.

If BTZAPPINCLUDEFULLDISTRIBUTION is set to 1 the BTCal will maintain the email's original SendTo, CopyTo, and BlindCopyTo values.

BTZAPPPROCESSFORMS

Accepted Value: <comma separated list of form names>

Default: None

This parameter defines a list of non-standard mail item forms whose remediation will be performed. This is a multi-valued case-insensitive parameter.

A value of "None" represents the condition of the form being blank or absent from the document. The following values for this parameter are invalid and will be ignored:

- Memo
- Reply
- Reply with history

BTZAPPIGNOREFORMS

Accepted Value: allnonstandard/<comma separated list of form names>

Default: None

This parameter defines a list of non-standard mail item forms whose remediation will be skipped. This is a multi-valued case-insensitive parameter.

A value of "none" represents the condition of the form being blank or absent from the document. If the first value of this parameter is set to is "allnonstandard", all other values are ignored and forms except for "memo", "reply", "reply with history", "appointment", "notice", "task", "delivery report", "nondelivery report", "return receipt", "trace report", "phone message" will cause BTCal to skip remediation.

BTZAPPIGNOREALLFORMS

Accepted Value: 0/1

Default: 0

This parameter specifies whether remediation will be skipped for a mail item that contains a non-standard form.

If a value of 1 is specified for this parameter, all forms except for "memo", "reply", "reply with history", "appointment", "notice", "task", "delivery report", "nondelivery report", "return receipt", "trace report", "phone message" will cause BTCal to skip remediation. Specifying BTZAPPIGNOREALLFORMS=1 has the same effect as specifying BTZAPPIGNOREFORMS=allnonstandard.

BTZAPPORGS/BTZAPPORGSx

Accepted Value: <comma separated list of org units>

Default: None

This parameter defines a multi-valued list of legacy Domino Organizations used for determination of document security in the BTStore Database. For each recipient of a remediated document, a corresponding entry in the Domino Directory is located and each value of the full name is examined to locate the value that matches user's name in Notes ID file. Each hierarchical entry will be compared against the list of organizations specified by this parameter and the first hierarchical value matching one of the values in the list will be used for securing the copy of the mail item in the BTStore Database using a Readers field called $BTReaders.

NOTE ! If no full name value contains an organization matching one of the values in the list, the document will be unsecured when placed into the BTStore Database.

If the total list of organizations is larger than 240 characters, it can be separated across multiple BTZAPPORGSx variables. Any number of sequentially numbered BTZAPPORGSx variables can be defined, starting with BTZAPPORGS1.

The following example illustrates 2 alternatives of defining valid Domino Organizations:

- BTZAPPORGS=BinaryTree,BinTree,BT,BTree

Or

- BTZAPPORGS1=BinaryTree,BinTree,
- BTZAPPORGS2=BT,BTree

NOTE !
- In the second alternative, every BTZAPPORGSx line, except for the last one, must end with a comma.
- If BTZAPPORGS and BTZAPPORGS1 – BTZAPPORGSn approaches are used, the BTZAPPORGS value will be ignored.
- *Country code cannot be listed with organization; for example, "contoso/fr" (organization/country code) will not work. Use "contoso" (organization name) only.*

BTZAPPREADERS

Accepted Value: *<Domino address>*

Default: None

This parameter defines an additional value for the $BTReaders field described in the BTZAPPORGS section. Usually, this value represents a group containing the LocalDomainServers group and other administrative group(s).

BTZAPPRENDERSTOREDFORMS

Accepted Value: 0/1

Default: 0

This parameter specifies whether BTCal will process a memo containing a stored form. If BTZAPPRENDERSTOREDFORMS is set to 0, the stored form will be ignored and only the remediation notice will be sent; otherwise, the stored form will be processed by BTCal.

This parameter can be used for custom mail database designs and will only work if the value of the *BTZAPPSENDORIGINAL* parameter is anything but a zero (BTZAPPSENDORIGINAL accepts 0, 1, 2, and 3).

BTZAPPSENDORIGINAL

Accepted Value: 0/1/2/3

Default: 0

This parameter defines whether an unremediated copy of the mail item is sent to the Exchange user. It

should be understood that this mail item will be missing specific Notes-only elements and functionality, but the text will be there. The action taken for each value is as follows:

- 0 - the feature is disabled.

- 1 - the original mail item is sent in addition to the ZApp notification. In this case, two mail messages are received by each recipient.

- 2 - the ZApp notification is inserted into the original mail item at the top. In this case one mail message is received by each recipient.

- 3 - the ZApp notification is inserted into the original mail item at the bottom. In this case one mail message is received by each recipient.

NOTE! This parameter does not affect the process of storing the mail item in the BTStore database.

BTZAPPFIELDSx

Accepted Value: *<comma separated list of field:value pairs>*

Default: None

This parameter contains a list of field:value pairs, separated by a comma. If configured, BTCal will check each message for the configured field, and if found, will compare the value of that field with the configured value. If they are equal, BTCal will remediate the mail item. Note that only fields of TYPE_TEXT and TYPE_NUMBER are supported.

If the total list of field:value pairs is larger than 240 characters, it can be separated across multiple BTZAPPFIELDSx variables. Any number of sequentially numbered BTZAPPFIELDSx variables can be defined, starting with BTZAPPFIELDS1.

The following example illustrates 2 alternatives of defining valid field:value pairs:

BTZAPPFIELDS=MailFormat:E,Z:1

Or

BTZAPPFIELDS1=MailFormat:E,

BTZAPPFIELDS2=Z:1

NOTE!
- In the second alternative, every BTZAPPFIELDSx line, except for the last one, must end with a comma.

- If BTZAPPFIELDS and BTZAPPFIELDS1 – BTZAPPFIELDSn approaches are used, the BTZAPPFIELDS value will be ignored.

BTSTORETEXTx

Accepted Value: *<text>*

Default: *The original custom form that was mailed to you can be found using the following link:\n\n".*

This parameter defines the text of the custom e-mail sent to a recipient of a "ZApp'ed" e-mail. There can be any number of lines of text; however, the lines must be sequentially numbered starting with 1 and the text of each line cannot exceed 216 characters. When the e-mail text is created, the content of lines is scanned as a single string with no implied line ends. Line ends are defined by the string \n in the text of

any line. The string "\t" defines a tab.

NOTE !	Because NOTES.INI parameters cannot have leading or trailing spaces, each BTSTORETEXTx line must begin and end with a non-blank character.

For example:

BTSTORETEXT1=Dear User\n\n\tAn e-mail was sent to you from Domino containing special object

BTSTORETEXT2=s accessible only via Notes Client.\n\n

BTSTORETEXT3=To access this e-mail please click this link ----->\t

Translates as follows:

Dear User

> *An e-mail was sent to you from Domino containing special objects accessible only via Notes Client.*

To access this e-mail please click this link----->.

If BTSTORETEXT is not configured, the default text is as follows:

The original custom form that was mailed to you can be found using the following link:\n\n".

BTZAPPUSERFORMS

Accepted Value: *<list of non-standard form names separated by commas>/All/None*

Default: None

This parameter defines a list of non-standard mail item forms. The BODY of these non-standard mail item forms should be checked for remediation. This is a multi-valued case-insensitive parameter. A value of "None" represents the condition of the form being blank or absent from the document. A value of "All" indicates that all messages containing a non-standard form in the FORM field will be checked for remediation. It is valid to specify both All and None. When checking for ZAppable items, the only field checked is the BODY field.

BTZAPPTABLES

Accepted Value: Y/N

Default: N

This parameter accepts a value of Y or N. It is used to specify whether BTCal should remediate mail messages that contain non-basic tables.

BTZAPPIGNOREELEMENTS

Accepted Value: All, Button, Mouseover, Popup, Hotregion

Default: None

BTZAppIgnoreElements accepts the following as comma-separated values:

- All

- Button
- MouseOver
- PopUp
- HotRegion

Please note that these values are not case sensitive. Each value represents a valid ZAppable element, with ALL representing the combination of the remaining values. If this parameter is configured, and ZApp is enabled, BTCal will examine the mail item to see if the ZAppable element should be ignored. For example, if you have specified "BTZAPPIGNOREELEMENTS=Mouseover,Popup", and the mail item contains a Mouseover, BTCal will not ZApp the mail item. Also note that if you have "BTZAPPIGNOREELEMENTS=Mouseover", and the mail item contains both a Mouseover and Button, the mail item will still be ZApped since you did not configure the Button to be ignored. The mail item will NOT be ZApped if it contains only the specified element.

BTZAPPKEEPATTACHMENTS

Accepted Value: 0/1

Default: 0

This parameter specifies whether attachments will be retained on ZApped messages. By default (parameter set to the default value of 0), attachments are deleted from ZApped messages. When enabled (parameter set to 1), attachments to ZApped messages are retained. This does not alter the attachment as it appears in the BTStopre.nsf.

> **NOTE!** The BTZAPPSENDORIGINAL parameter does not affect this parameter, When BTZAPPKEEPATTACHMENTS is enabled, attachements will be retained on ZApped messages regardless of the BTZAPPSENDORIGINAL parameter setting.

Logging

There may come a time when it is necessary to gather more information than what is simply written to the Domino console log. There are several logging parameters built into the product that are used to accomplish this. Note that enabling any type of logging will affect performance. Therefore, it is recommended that these parameters only be enabled when instructed to do so by a Binary Tree representative.

> **NOTE!**
> - Logging can be enabled or disabled on the fly (i.e., you do not need to restart BTCal).
> - When writing messages to the log file(s), the messages are appended to the end of the file. To capture a clean log, the previous log file must be deleted before logging of the current session is enabled.
> - A new type of log file is generated on the Windows Coexistence server when there is a SOAP: Fault message returned by the Exchange Web Services. The new log files are named *.error.log. The log folder can be specified using IIS manager to set it in the Application properties.
>
>   If the SOAP: Fault message indicates the CAS throttling policy has been exceeded, the following EMC commands could be used on the CAS server to create a new throttling policy that has no limits, and assign it to the IIS box:
>
>   New-ThrottlingPolicy BTFreeBusy
>
>   Set-ThrottlingPolicy BTFreeBusy -RCAMaxConcurrency $null -RCAPercentTimeInAD $null -RCAPercentTimeInCAS $null -RCAPercentTimeInMailboxRPC $null -EWSMaxConcurrency $null -

EWSPercentTimeInAD $null -EWSPercentTimeInCAS $null -
EWSPercentTimeInMailboxRPC $null -EWSMaxSubscriptions $null -
EWSFastSearchTimeoutInSeconds $null -EWSFindCountLimit $null -
CPAMaxConcurrency $null -CPAPercentTimeInCAS $null -
CPAPercentTimeInMailboxRPC $null -CPUStartPercent $null

Set-ThrottlingPolicyAssociation [your iis machine name] -ThrottlingPolicy
BTFreeBusy

BTLOGDIRECTORY

Accepted Value: <Windows path name>

Default: Windows temp directory

This parameter defines the directory to which log files will be written. It expects a properly formatted windows path name (e.g., c:\CMTc\log). If the specified directory does not exist, BTCal will attempt to create the directory. If this directory cannot be found or created, or if this parameter is not specified, log files will be written to the Windows temp directory.

BTLOGCACHE

Accepted Value: 0/1

Default: 0

A cache database is used to store data required for proper processing of repeating/recurring meetings by BTCal. This parameter defines whether messages relating to processing of the cache database will be logged. If BTLOGCACHE is set to 0, logging is disabled; otherwise, log messages are written to the file BTCACHE.LOG.

BTLOGRMB

Accepted Value: 0/1

Default: 0

During the processing of calendar invitations received from Exchange, MIME body parts are converted to an .ICS file attachment for delivery to Notes. This parameter defines whether messages relating to this conversion will be logged. If BTLOGRMB is set to 0, logging is disabled; otherwise, log messages are written to the file BTRMB.LOG.

BTLOGUIF

Accepted Value: 0/1

Default: 0

During the processing of calendar invitations received from Exchange, certain fields within the .ICS file are updated before being delivered to Notes. This parameter defines whether messages relating to the updating of .ICS files will be logged. If BTLOGUIF is set to 0, logging is disabled; otherwise, log messages are written to the file BTUIF.LOG.

BTLOGWMBP

Accepted Value: 0/1

Default: 0

During the processing of calendar invitation received from Exchange, if the .ICS file has been updated, the MIME body part may need to be re-written. This parameter defines whether messages relating to re-writing of the MIME body part will be logged. If BTLOGWMBP is set to 0, logging is disabled; otherwise, log messages are written to the file BTWMBP.LOG.

BTLOGCONSOLE

Accepted Value: Y/N

Default: Y

Integration for Notes has been enhanced to allow the user to determine whether log messages should be written to the Domino console.

BTLOGCONSOLE accepts a value of Y(es) or N(o), with the default being Y. Note that Error messages are always written to the console, regardless of the setting of this parameter. Also, note that log messages are always written to the General BTCal log regardless of the setting of this parameter.

BTLOGLEVEL

Accepted Value: 0/1/2

Default: 0

A log file named BTLOG.YYY.MM.DD@HH.MM.SS.LOG resides in the Logging Directory configured for Integration for Notes. All log messages are written to this file, based upon the setting of the BTLOGLEVEL parameter, and optionally to the Domino console (depending on the setting of BTLOGCONSOLE).

BTLOGLEVEL accepts a value of 0 (minimal), 1 (light), or 2 (full), with the default being 0. A log level of 1 corresponds to the debug messages written using the old BTCalL.exe. A log level of 2 corresponds to the debug messages written using the old BTCalF.exe.

BTLOGPNG

Accepted Value: 0/1

Default: 0

If a message from Outlook contains embedded .PNG graphic files, the images are converted to .GIF files and displayed properly when viewed within Notes.

BTLOGPNG accepts a value of 0/1, with the default being 0. When set to 1, Integration for Notes logs all messages relating to PNG processing to a file called BTPNG.LOG, which resides in the Logging directory configured for Integration for Notes .

NOTE! The BTEx DLL version contained within the current release must be used for full support of embedded PNG conversion.

BTLOGCANCEL

Accepted Value: 0/1

Default: 0

When BTLOGCANCEL is set to 1, BTCal turns on full debugging (equivalent of BTCalF) if it detects that it is processing an inbound cancellation message. When processing of that message is complete, logging returns to the value specified in BTLogLevel.

> **NOTE!** This parameter does not have any effect if you are running BTCalF as it is already at full logging.

BTANONYMIZELOGGING

Accepted Value: 0/1

Default: 0

When BTANONYMIZELOGGING is set to 1, subject and originator are anonymized (appear as asterisks) when logging.

Delegation NDRs

BTCal can be configured to trap meetings that have been forwarded from an Outlook user to a Notes user. The Outlook user will receive a Non-Delivery Report (NDR) with customizable text stating that this is an unsupported action. Please refer to Appendix H for details regarding cross-platform delegation.

> **NOTE!** This feature will only work with Exchange 2010 or higher.

Two parameters support this functionality:

BTDelegateNDR=

Accepted Value: Y/N

Default: Y

This parameter accepts a value of Y or N. It specifies whether BTCal will return an NDR when it detects an inbound (from Outlook) meeting delegation request. If this is set to Yes, an NDR will be returned. If this is set to No, the $REF field will be deleted from the inbound message and it will be passed through to the recipient.

Unused Parameters

The following parameters are no longer required for the Integration for Notes (3.0 release or higher) of BTCal.

- BTHOLDDOMAIN
- BTDEBUGIDLEDELAY

Appendix G: Notes.ini Parameter Values

NOTES.INI Parameters	Accepted Value	Default Value
BTADDUSERDWASUPPORT	Y/N	
BTALTEXCHANGEDOMAINS	<comma-separated domain names>	None
BTAPPTREROUTE	0/1	1
BTBCCSKIPADDRESS	<SMTP address>	None
BTBLOCKCANCELNOCACHE	Y/N	Y
BTBLOCKUPDATENOCACHE	Y/N	N
BTCACHEDB	<BTCache.nsf>	BTCAL.NCF
BTCALRESTARTTIMER	<number>	0 (no restart)
BTCALSTATSNDR	0/1	1
BTCALSTATSNOCHANGE	0/1	0
BTCALSTATSZAPP	0/1	1
BTCHECKINTERNALSMTP	0/1	0
BTCHECKRECIPIENTS	Y/N	N
BTCOEX_APPROVED_CALLERS	<list of IP addresses>	Required
BTCOEX_BYPASS_REQUESTOR	0/1	0
BTCOEX_CLIENT_LOG	6	6
BTCOEX_DEFAULT_FB_ACCESS_ACCOUNT	<SMTP address>	Required
BTCOEX_DOMINO_DOMAINS	<comma-separated domain names>	Required
BTCOEX_EXCHANGE_DOMAINS	<comma-separated domain names>	Required
BTCOEX_FOREIGN_WS_URL	https://autodiscover.%domino.contoso%.com/BTAvailability/Availability.asmx	Required
BTCOEX_LOG	0-8	0

NOTES.INI Parameters	Accepted Value	Default Value
BTCOEX_LOGDATA	1,2,4,8	???
BTCOEX_LOGFILE	Log file should be relative to the <Domino server>\Domino Data Directory	\IBM_TECHNICAL_SUPPORT\OUTPUT.LOG
BTCOEX_NSF	btws.nsf	btws.nsf
BTCOEX_RECYCLE_ENV_REQ_COUNT	<number>	2500
BTCOEX_SERVER_LOG	0-6	0
BTCOEX_SERVICE_TYPE	COEX	COEX
BTCOEX_WS_NAME	<Virtual directory used by the BTRouter on the Windows Coexistence server>	BTAvailability
BTCONVERTPNG	0/1	0
BTCONVERTPROPOSE	0/1	0
BTDELAY	<number>	60
BTDELEGATENDR	Y/N	Y
BTEXCHANGEDB	<mailbox name>	Required
BTEXCHANGEDOMAIN	<domain name>	Required
BTEXCHANGEROUTER	BTExchange.box	Required
BTEXCHANGESERVER	<SMTP address>	Required
BTEXPANDCALGROUPS	Y/N	N
BTEXPANDMAILGROUPS	Y/N	N
BTEXPANDGROUPS	Y/N	N
BTEXPANDGROUPSDOMAIN	<string>	None
BTFORCELOCATIONRESOLUTION	0/1	0
BTINATTOPT	0/1	0

NOTES.INI Parameters	Accepted Value	Default Value
BTINATTSKIPNAMES	\<comma-separated filename patterns\>	None
BTINTERNALSMTPDOMAIN	\< SMTP domain,SMTP domain2\>	None
BTKEEPPOSTED	Y/N	Y
BTLINKSOPTION	0/1	0
BTLOGCACHE	0/1	0
BTLOGCANCEL	0/1	0
BTLOGCONSOLE	Y/N	Y
BTLOGDIRECTORY	\<Windows path name\>	Windows temp directory
BTLOGLEVEL	0/1/2	0
BTLOGPNG	0/1	0
BTLOGRMB	0/1	0
BTLOGSTATS	0/1	0
BTLOGUIF	0/1	0
BTLOGWMBP	0/1	0
BTMULTISCHEDREPORTADDRESS	\<SMTP address\>	None
BTMULTISCHEDREPORTADDRESSTYPE	0 or 1 or 2	0
BTMULTISCHEDREPORTLEVEL	1 or 2 or 4	1
BTMULTISCHEDREPORTTEXTx	BTMULTISCHEDREPORTTEXTx	Dear User, The calendar pattern used in the invitation you sent is not supported at this time for the following reason: %REASON% Please reschedule using another pattern! Original invitation information: Subject: %SUBJECT%

NOTES.INI Parameters	Accepted Value	Default Value
		Date: %DATE%
BTNONDRONQUIT	0/1	0
BTNDRFROMADDRESS	<email address> or <common name>	None
BTNOTESDOMAINS	<comma-separated domain names>	Required
BTNOTIFYONDELEGATEORCOUNTER	0/1	0
BTONLINEMEETINGLABEL	<text>	None
BTORPHANDELAY	<number>	300
BTINMESSAGEMAX	0/<any number greater than 0>	100
BTPARTIALTEXT	<text>	Room/Resource is already booked for the following date(s). You must use another time or find another resource.
BTPRESERVEATTACHMENTS	0/1	1
BTPROCESSDOMAIN	<SMTP domain>	Required
BTRECIPCONVERTFIELD	shortname/internetaddress-local/internetaddress-full	shortname
BTRECURRENCELIMIT	<number>	1200
BTRESOLVENDRRECIPIENTS	Y/N	N
BTRESOLVENDRRECIPIENTSDOMAIN	<string>	None
BTRETRYLIMIT	<number>	10
BTRETRYLIMITTEXTx	<text>	None
BTRETRYSENDNDR	0/1	0
BTSENDEXPANDED	Y/N	Y
BTSTATSDB	<database name>	BTCALSTA.NSF
BTSTOREDB	<database name>	BTSTORE.NSF

NOTES.INI Parameters	Accepted Value	Default Value
BTSTORETEXTx	<text of the custom e-mail to a recipient of a ZApp'ed e-mail>	None
BTSUBJECTPREFIXMARKER	<comma-separated list of markers>	None
BTSUPPORTMULTIPLEDOMINODOMAINS	0/1	0
BTTRUNCATESUBJECT	Y/N	N
BTWORKDIRECTORY	<Windows path name>	Windows temp directory
BTZAPPBYPASS	0/1	0
BTZAPPBYPASSDOCSWITHFIELDS	<comma-separated list of field names>	None
BTZAPPCHECKENCRYPT	0/1	1
BTZAPPCOMBINEENCRYPTEDCALENDAR	0/1	1
BTZAPPENCRYPTTEXT	0/1/2	Contents of this document are encrypted with a Notes certificate and cannot be read.
BTZAPPFIELDSx	<comma separated list of field:value pairs>	None
BTZAPPIGNOREALLFORMS	0/1	0
BTZAPPIGNOREELEMENTS	<comma-separated list of element names>	None
BTZAPPIGNOREFORMS	allnonstandard/<comma separated list of form names>	None
BTZAPPIGNORESTOREDFORMS	0/1	0
BTZAPPINCLUDEFULLDISTRIBUTION	0/1	0
BTZAPPKEEPATTACHMENTS	0/1	0
BTZAPPORGS/BTZAPPORGSx	<comma-separated list of org units>	None
BTZAPPPDB	<database name>	BTZAPP.NSF
BTZAPPPROCESSFORMS	<comma-separated list of form names>	None
BTZAPPREADERS	<Domino address>	None

NOTES.INI Parameters	Accepted Value	Default Value
BTZAPPRENDERSTOREDFORMS	0/1	0
BTZAPPSENDORIGINAL	0/1/2/3	0
BTZAPPSUPPORT	0/1/2/3	0
BTZAPPTABLES	Y/N	N
BTZAPPTEMPLATE	<database template name>	Required if BTZAPPSUPPORT=2 or 3
BTZAPPUNIQUECOPY	Y/N	Y
BTZAPPUSERFORMS	<list of non-standard form names separated by commas>/All/None	None
EXTMGR_ADDINS		BTEx
MIMEFORCEATTACHMENTS	0/1	0

Appendix H: Considerations for Domino SMTP Domain Exposure

If Exchange and Domino do not share a common SMTP domain, you can expose the Domino domain directly.

If Exchange and Domino share a common SMTP domain, you will need to create a unique domain by which Domino users can be uniquely identified by Exchange. For instance, if Domino receives and routes mail to addresses, such as michael@contoso.com, and Exchange receives and routes mail to addresses, such as david@contoso.com, this would indicate a shared SMTP domain namespace. A new SMTP domain must be created to allow Exchange to route Free/Busy calls properly to Domino, such as domino.contoso.com. When one of these contacts is viewed, their primary SMTP address would be james@contoso.com, but their target address would be *james@domino.contoso.com*. In this case, the SMTP domain that you want to expose from Domino is in fact *domino.contoso.com*. The domain name you choose will also determine the Autodiscover hostname used in DNS for the IIS box.

Appendix I: Processing Repeating Meetings

Overview

Notes / Domino and Microsoft Outlook / Exchange provide to end-users an extensive list of features and functions in the area of repeating/recurring calendar events, specifically, meetings. While the overall concept and interface are fairly similar in both environments, the technical implementation of the functionality is dramatically different between the two. From a simple difference in terminology (Exchange uses the term recurring while Domino uses the term repeating, when referring to multi-instance calendar events) to the radically different approach of managing recurrence patterns, changes to individual or multiple occurrences, the disparity makes it sometimes impossible to transparently represent repeating/recurring meeting workflow in a mixed messaging environment.

When traditional SMTP transport is used to exchange repeating/recurring meeting invitations, updates, cancellations and responses between Notes and Microsoft Outlook users, some common functions do not work. Integration for Notes enhances the interchange of calendar functionality to ensure the highest level of fidelity in workflow of single instance and repeating/recurring meetings in a cross-platform environment.

The following table provides a high-level illustration of functionality enhancement delivered by Integration for Notes as compared to pure SMTP:

In spite of Integration for Notes's advanced functionality, a small subset of one system's functionality simply cannot be transparently supported by another. The limitation is not caused by Integration for Notes, but by mismatch in functionality between Microsoft Outlook and Notes calendars.

The negative impact may be either visual or functional; the former results in user inconvenience, the latter causes loss of functionality or even calendar data. In these rare cases, Integration for Notes is able to recognize the conditions that may create a negative impact on users and stop them from reaching their intended destination while sending a customizable report to the originator and/or an administrator informing them of the problem and suggesting corrective action.

The remainder of this document provides details of how Integration for Notes handles repeating/recurring meetings in a mixed messaging environment.

Repeating Meetings from Notes

Supported Invitations

The Vast majority of patterns used in Notes to schedule repeating meetings are supported in a mixed environment. Supported repeating patterns include:

- Daily – every N days;

- Weekly – single or multiple days per week every N weeks;

- Monthly by Date – specific date of a month every N months;

- Monthly by Day – specific weekday of a month every N months;

- Yearly – specific date of a year every N years;

Meeting invitations with supported repeating patterns originating in Notes will be correctly delivered and applied to Microsoft Outlook calendars depending on whether Microsoft Outlook users accept, tentatively accept or decline these invitations.

Unsupported Invitations

A few Notes repeating patterns cannot be supported by Microsoft Outlook:

- Custom pattern – arbitrary collection of dates.

- All patterns (except for daily) that specify that meeting instances falling on a weekend should be moved or deleted (e.g. Move to Monday or Move to Nearest Weekday). The Notes Daily repeating meeting pattern will appear in Outlook as a Weekly repeating meeting occurring on each day.

- Monthly by date with multiple dates of the month (e.g. 4th, 6th and 10th).

- Monthly by day with multiple days of the month (e.g. 1st Mon, 2nd Tue and 3rd Thu).

Supported Reschedules

Reschedules of a single instance of a repeating meeting as well as all instances of a repeating meeting are properly supported. Such reschedules will be correctly delivered and applied to Microsoft Outlook calendars depending on whether Microsoft Outlook users accept, tentatively accept or decline these reschedules.

Unsupported Reschedules

Updating or rescheduling all instances of a repeat meeting originating from Notes using the Monthly by Day pattern is not supported.

Reschedules of a subset of instances of a repeating meeting cannot be supported by Microsoft Outlook. Such subsets are represented by "This instance and all previous instances" and "This instance and all future instances" options.
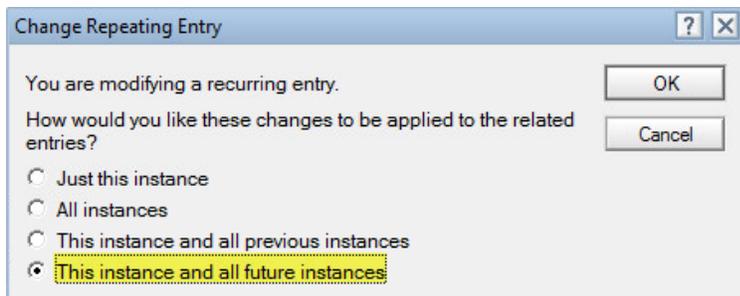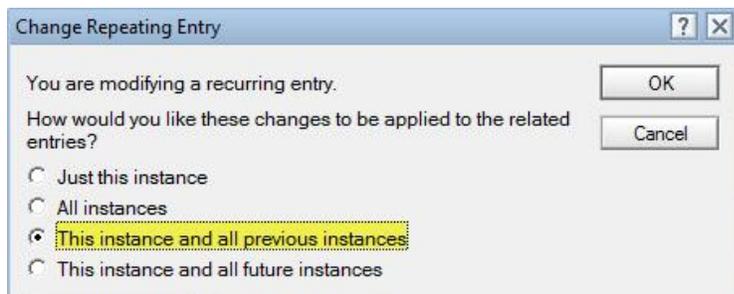
NOTE! Confirming the entire series after confirming an instance from the series is not supported.

Supported Confirmations

Confirmations of a single instance of a repeating meeting as well as all instances of a repeating meeting are properly supported. Such confirmations will be delivered as reschedules and applied to Microsoft Outlook calendars depending on whether Microsoft Outlook users accept, tentatively accept, or decline them.

Unsupported Confirmations

Confirmations of a subset of instances of a repeating meeting cannot be supported by Microsoft Outlook. Such subsets are represented by "This instance and all previous instances" and "This instance and all future instances" options.

A confirmation of all instances is handled the same way as a reschedule of all instances.

NOTE! Confirming the entire series after confirming an instance from the series is not supported.

Supported Updates

Updates to a single instance of a repeating meeting as well as all instances of a repeating meeting are properly supported. Such updates will be correctly delivered and applied to Microsoft Outlook calendars.

Unsupported Updates

Updates to a subset of instances of a repeating meeting cannot be supported by Microsoft Outlook. Such subsets are represented by "This instance and all previous instances" and "This instance and all future instances" options.

Supported Cancellations

Cancellations of a single instance of a repeating meeting as well as all instances of a repeating meeting are properly supported. Such reschedules will be correctly delivered and applied to Microsoft Outlook calendars.

Unsupported Cancellations

Cancellations of a subset of instances of a repeating meeting cannot be supported by Microsoft Outlook. Such subsets are represented by **This instance and all previous instances** and **This instance and all future instances** options.

Unsupported Room or Resource specified in the Room/Resource: field in a Meeting

When scheduling a meeting from Notes that contains both an Exchange Room/Resource and an Outlook user, if the Room or Resource is specified in the **Room/Resource:** field in the invitation, the Notes user will receive an NDR. This is because Outlook cannot support invitations containing a Room/Resource that are specified this way. To include an Exchange Room/Resource successfully, it must be specified in the **To:** field instead.

Supported Removing Invitees from Repeat Meetings

Removing an Outlook invitee from one or all occurrences of a repeat meeting originated in Notes is supported.

Supported Actions by Outlook Users

Outlook users can propose a new time on a single instance of a repeating meeting that had previously been rescheduled.

Outlook users can decline a single instance of a repeating meeting that had previously been rescheduled.

Recurring Meetings from Microsoft Outlook

Supported Invitations

All patterns used in Microsoft Outlook to schedule repeating meetings for a defined date range or occurrences count are supported in the mixed environment. Supported repeating patterns include:

- Daily – every N days;
- Weekly – single or multiple days per week every N weeks;
- Monthly by Date – specific date of a month every N months;
- Monthly by Day – specific weekday of a month every N months (with End by);
- Yearly – specific date of a year every N years;
- Yearly – specific day of a month every N years;

Meeting invitations with supported repeating patterns originating in Microsoft Outlook will be correctly delivered and applied to Notes calendars depending on whether Notes users accept, tentatively accept, or decline these invitations.

Unsupported Invitations

Any recurrence pattern listed above with "No End Date" cannot be supported by Notes, since Notes does not have a corresponding feature.

Supported Reschedules

Reschedules of a single instance of a repeating meeting as well as all instances of a repeating meeting are properly supported. Such reschedules will be correctly delivered and applied to Notes calendars depending on whether Notes users accept, tentatively accept or decline these reschedules.

Reschedules will typically contain "Rescheduled" in the Subject line. Reschedules to single occurences that also include other changes, such as a location change, will include the other change in the Subject instead of "Rescheduled".

Unsupported Reschedules

Any change to the duration of the recurrence pattern, by increasing or decreasing the number of occurrences, or extending or curtailing the end date cannot be supported by Notes. Additionally, any change to the recurrence pattern itself. For example, changing from daily to weekly recurrence cannot be supported by Notes.

Rescheduling the entire series after rescheduling an instance from the series is not supported.

> **NOTE !** The default behavior of BTCal is to assume all calendar updates coming from an Exchange chair to a Domino participant where there is no information of the meeting in the BTCache database are valid and are delivered to the Domino participant. Note that this default behavior can be changed by changing the BTBLOCKUPDATENOCACHE parameter in the NOTES.INI file.

Supported Updates

Updates for a single instance of a repeating meeting as well as all instances of a repeating meeting are properly supported. Such updates will be correctly delivered and applied to Notes calendars when Notes users choose to update calendars.

Updates to the attachments will be noted as a description change in the Subject line. Location changes will be noted as a location change in the Subject line.

Supported Cancellations

Cancellations of a single instance of a repeating meeting as well as all instances of a repeating meeting are properly supported. Such reschedules will be correctly delivered and can be applied to Notes calendars.

Unsupported Cancellations

If an Outlook user schedules a recurring meeting **that contains both a Notes Room/Resource and a Notes user**, cancels a single occurrence of that recurring meeting, and then subsequently attempts to cancel the entire series, BTCal will return an NDR to the Outlook user. This functionality is not supported.

Supported Adding/Removing Invitees

Adding Notes invitees to or removing Notes invitees from a Microsoft Outlook meeting is supported.

Handling Unsupported Events

Integration for Notes can be configured either to look for problematic repeating/recurring meeting activities or to ignore them. In the case of the latter, all events will be allowed to proceed to their destinations untouched. However, these unsupported events cause unexpected and unwanted calendar workflow behavior. Calendars are often not updated correctly without any indiction to the chairperson or invitees. In the case of the former, Integration for Notes will stop the problematic activity and send a

failure notification to the activity originator. Optionally, Integration for Notes can be configured to send a failure notification to a designated administrator or multiple administrators. The text of this delivery failure is also customizable using the **BTMULTISCHEDREPORTTEXTx** NOTES.INI variable.

For example:

Dear User

You are performing an operation on a repeating/recurring meeting, which is not supported in a mixed environment. Unsupported functionality includes:

Scheduling or rescheduling one or more occurrence(s) of a meeting using an unsupported (complex) recurrence pattern.

Adding one or more invitees to a meeting, who reside in a different environment than yours.

Please cancel the original meeting and schedule a new one using a supported pattern.

Important Differences in Repeating Meeting Functionality between Notes and Outlook

There are several options in the Notes implementation of repeating meetings, which are not available in Microsoft Outlook. Likewise, there are several options in the Microsoft Outlook implementation of repeating meetings, which are not available in Notes. When these options are used in scheduling or modifying a repeating meeting, they will be intercepted and handled based on the configuration options described earlier in this document.

Unsupported Recurrence Pattern Originating in Notes

Yearly repeating meetings on the last day of the month, generated from Notes to Outlook, causes an unsupported meeting pattern message to be received in Outlook.

Modifying Meeting Subset in Notes

As stated earlier in the document, Notes supports rescheduling, update, confirmation and cancellation of a subset of repeating meeting instances defined as "This instance and all previous instances" and "This instance and all future instances". Since these options do not have an equivalent in Microsoft Outlook, they cannot be supported as part of a cross-platform calendar workflow.

Extending or Altering Recurrence Pattern in Microsoft Outlook

As stated earlier in the document, Microsoft Outlook supports modification or extension of a recurrence pattern. This functionality does not have an equivalent in Notes, therefore cannot be supported as part of a cross-platform calendar workflow.

Recurrence Pattern with No End Date in Microsoft Outlook

As stated earlier in the document, Microsoft Outlook supports recurrence patterns without a defined end date. This functionality does not have an equivalent in Notes, therefore cannot be supported as part of a cross-platform calendar workflow.

Handling of the Entire Series Reschedule in Notes

Notes treats the rescheduling of the entire repeating meeting series as relative to any reschedules which have been previously made to any individual instance of the meeting. This functionality is described in the following example:

Original meeting:

- Repeating meeting was scheduled to start on Monday and repeat every day for 5 days from 9 A.M. to 9:15 A.M.

Subsequent individual modification events followed by reschedule of the entire series:

- Tuesday's occurrence was rescheduled to take place from 10 A.M. to 10:15 A.M.

- Wednesday's occurrence was rescheduled to take place from 8 A.M. to 8:30 A.M.

- Thursday's occurrence was cancelled

- Then the entire meeting was rescheduled to take place from 1 P.M. to 1:15 P.M.

Resulting meeting dates/times:

Monday: 1 P.M. to 1:15 P.M.

Tuesday: 2 P.M. to 2:15 P.M.

Wednesday: 12 noon to 12:30 P.M.

Thursday: no meeting

Friday: 1 P.M. to 1:15 P.M.

Handling of the Entire Series Reschedule in Microsoft Outlook

Microsoft Outlook treats rescheduling of the entire repeating meeting series as an absolute event, ignoring any previously made changes to individual occurrences. This functionality is described in the following example:

Original meeting:

- Repeating meeting was scheduled to start on Monday and repeat every day for 5 days from 9 A.M. to 9:15 A.M.

Subsequent individual modification events followed by reschedule of the entire series:

- Tuesday's occurrence was rescheduled to take place from 10 A.M. to 10:15 A.M.;

- Wednesday's occurrence was rescheduled to take place from 8 A.M. to 8:30 A.M.;

- Thursday's occurrence was cancelled;

- Then the entire meeting was rescheduled to take place from 1 P.M. to 1:15 P.M.

Resulting meeting dates/times:

Monday: 1 P.M. to 1:15 P.M.

Tuesday: 1 P.M. to 1:15 P.M.

Wednesday: 1 P.M. to 1:15 P.M.

Thursday: 1 P.M. to 1:15 P.M.

Friday: 1 P.M. to 1:15 P.M.

In another example of rescheduling repeating meetings, consider the following and its outcome.

Original meeting:

- An Outlook user schedules a repeating meeting to start on Monday and repeat every day for 5

days from 9 A.M. for an hour.

Subsequent individual modification events followed by reschedule of the entire series:

- Wednesday's occurrence was rescheduled to take place from 1.00 P.M.

- Then the entire meeting was rescheduled to take place from 10.00 A.M. for an hour.

If the Outlook user used the Outlook client, then the Notes user will receive a message that the individual occurrence (Wednesday) has been canceled; and if the Outlook user used Outlook Web Access (OWA), then the Notes user will receive a message that the Wednesdays' meeting has been rescheduled to 1.00 P.M.

In both cases, an NDR will be returned to the Outlook originator stating that rescheduling a series when an individual occurrence has already been rescheduled is not supported, and that the entire meeting should be canceled and rescheduled.

Summary

Although Integration for Notes successfully remediates repeating/recurring meeting workflow for the vast majority of cross-platform calendar events, there are still examples of functionality that cannot be supported. The most important success factor of any coexistence infrastructure implementation is the proper setting of expectations among end-users. Considering that limitations for the infrastructure are minimal, properly informing end-users about such limitations will avoid negative perception and attitude toward the coexistence solution.

Appendix J: Deployment Quick Reference

Domino Configuration

Files Deployment

Ensure that nBTCal.exe, nBTCalL.exe, nBTCalF.exe, nbtex.dll files are copied to Domino directory.

NOTES.INI Parameters

See Appendix G.

Domino Routing Configuration Modifications

1. **Foreign Domain Document**

    i.e. Exchange

    Mail Information

    Gateway server name: BTEXCHCONN/ACME

    Gateway mail file name: btexchange.box

    Calendar Information

    Calendar server name: BTEXCHCONN/ACME

    Calendar system: btexchange.box

2. **Foreign SMTP Domain**

    i.e. exchange*.binarytree.com Domain name: ExchangeDirect

3. **Server Configuration Document**

    SMTP used when sending messages outside of the local internet domain = **Enabled**

    SMTP allowed within local internet domain = **Disabled**

    Servers within the local Notes domain are reachable via SMTP over TCPIP = Always

    MIME Tab

    On the MIME tab navigate to the Conversion tab and then select the Outbound sub-tab. Enter the following information.

    Return receipts: Enabled

    Message content = from Notes to HTML

4. **Server Connection**

    1. Connection type = SMTP

    2. Source server = BTMail01/BinaryTree

    3. Connect via = Direct Connection

4. Destination server = CMTC Mail

5. Destination domain = ExchangeSMTPDirect

6. SMTP MTA relay host = 167.105.2.155 "

7. Replication task = Disabled

8. Routing task = SMTP Mail Routing

9. Route at once if = 1 messages pending

10. Routing cost = 1

11. Connection = enabled

12. Connect at times = 12:00 AM to 11:59 PM

13. Repeat interval of = 60 minutes

Appendix K: Customizable Non Delivery Report (NDR) Reason Codes

Integration for Notes includes customizable reason codes displayed for Non Delivery Reports (NDR's) sent by BTCal. The default reason codes in the table below will be displayed as part of the message defined in the BTMULTISCHEDREPORTTEXTx Notes.ini parameter by %reason%. The only exception is BTNDR22, which completely replaces the BTMULTISCHEDREPORTTEXTx.

The table below includes the default customizable reason codes in the Notes.ini file and valid keywords that can be used in the error message.

Default Reason Code	Explanation	Valid Keyword
BTNDR1="Converting a single instance meeting to a recurring meeting cannot be supported between Exchange and Domino. Please cancel the meeting and recreate it as a recurring meeting."	The Outlook user scheduled a single occurrence meeting and is now trying to convert it to a recurring meeting.	
BTNDR2=" Rescheduling an entire series of a recurring meeting that contains a Domino Room or Resource cannot be supported between Exchange and Domino. Please cancel and recreate the meeting."	The Outlook user attempted to reschedule the entire series of a meeting that contains a Domino Room or Resource.	
BTNDR3="Canceling an entire series of a recurring meeting that contains a Domino Room or Resource after a single occurrence has been cancelled cannot be supported between Exchange and Domino. Please notify all participants that they should delete the meeting from their calendars. The Room or Resource reservation must also be manually deleted from the Resource Reservations database."	The Outlook user attempted to cancel the series that contains a Domino Room or Resource but had previously canceled a single occurrence of the series.	
BTNDR4="You have specified that this recurring meeting should occur on the "0" (zero) day of each month, which cannot be supported by Domino. Please cancel and recreate the meeting using a value between 1-28 (the 29th, 30th and 31st days of each month are also not supported as not every month contains more than 28 days)."	The Outlook User scheduled a recurring meeting to occur on the zero day of each month. This appears to have been a bug in one or more versions of Outlook 2007.	%RULE%
BTNDR5="You have specified that this recurring meeting should occur on the 29th, 30th or 31st day of each month, which cannot be supported by Domino, because not every month contains more than 28 days. Please cancel and recreate the meeting using a value between 1-28"	The Outlook User scheduled a recurring meeting to occur on either the 29th, 30th or 31st day of each month. This is not supported by Notes.	

Default Reason Code	Explanation	Valid Keyword
BTNDR6="You have specified that this recurring meeting should occur on the 29th, 30th or 31st day of each month, which cannot be supported by Domino, because not every month contains more than 28 days. Please cancel and recreate the meeting using a value between 1-28."	The Outlook User scheduled a recurring meeting to occur on either the 29th, 30th or 31st day of each month. This is not supported by Notes.	
BTNDR7="Creating a recurring meeting with no end date cannot be supported by Domino. Please cancel and recreate the meeting specifying an end date or number of occurrences."	The Outlook user scheduled a recurring meeting with no end date, which cannot be supported by all versions of Domino and Notes.	
BTNDR8="Creating a recurring meeting that is scheduled to continue past 2037 cannot be supported by Domino. Please cancel and recreate the meeting so the series ends before the year 2037."	The Outlook user tried to schedule a recurring meeting that will go past year 2037.	
BTNDR9="Creating a recurring meeting with over 1200 instances cannot be supported by Domino. Please cancel and recreate the meeting with fewer than 1200 instances."	The Outlook user specified a recurring meeting that contains too many dates. By default, Integration for Notes will only support 1200 meetings for a recurring meeting. This is configurable via the BTRecurrenceLimit parameter. If the expanded list of individual meetings exceeds this limit, this error will be returned.	
BTNDR10="Rescheduling the entire series of a meeting after one or more occurrences have been rescheduled cannot be supported between Exchange and Domino. Please cancel and recreate the entire meeting series."	The Outlook user rescheduled a single occurrence of a recurring meeting, and is now trying to reschedule the entire series.	
BTNDR11="The recurring meeting contains a larger number of instances than can be supported between Exchange and Domino. Please cancel and recreate the meeting with fewer instances."	The Outlook user specified a recurring meeting that contains too many dates. For recurring meetings, the RRULE from the ICS file is expanded into a list of individual date/times for the meeting. These are stored in a 32K buffer. Too many dates and will overflow this buffer and this error will be returned.	
BTNDR12="Creating a recurring meeting with a date in the "Until" field that is before the first meeting date cannot be supported by Domino. Please cancel and recreate the meeting with valid dates."	The Outlook user specified an "UNTIL" date/time that preceded the first date/time of the meeting. This appears to have been a bug in one or more versions of Outlook 2007.	

Default Reason Code	Explanation	Valid Keyword
BTNDR13="There was an internal processing issue that should be reported to IT Support as an invalid cache document. Please cancel and recreate the meeting."	There were problems with the cache document for the meeting, such as it could not be opened or a specific field could not be found.	
BTNDR14="Your meeting update could not be processed due to an uncorrectable error. Please cancel the entire meeting and recreate it."	This is defensive code for a scenario found in a customer's production environment. Although we had the offensive ICS file, we were not able to reproduce, or determine the root cause.	
BTNDR15="Your meeting update could not be processed due to an uncorrectable error. Please cancel the entire meeting and recreate it."	This is defensive code for a scenario found in a customer's production environment. Although we had the offensive ICS file, we were not able to reproduce, or determine the root cause.	
BTNDR16="Your meeting update could not be processed due to an uncorrectable error. Please cancel the entire meeting and recreate it."	This is defensive code for a scenario found in a customer's production environment. Although we had the offensive ICS file, we were not able to reproduce. Integration for Notes expands the RRULE for a recurring meeting into a series of RDATES, with each RDATE representing a single instance of the recurring meeting. While trying to do this, one of the parameters taken from the ICS file is invalid.	
BTNDR17="Your meeting update could not be processed due to an uncorrectable error. Please cancel the entire meeting and recreate it."	This is defensive code for a scenario found in a customer's production environment. Although we had the offensive ICS file, we were not able to reproduce, or determine the root cause.	%RULE%
BTNDR18="Changing the recurrence pattern of the meeting cannot be supported by Domino. Please cancel and recreate the entire series."	You cannot change the original definition of the meeting occurrences. For example, you cannot schedule a recurring meeting in Outlook for Monday-Friday, and then change the recurrence pattern to start on Wednesday and continue for 3 days.	
BTNDR19="Changing the entire series of a recurring meeting after one or more instances of that meeting have been changed cannot be supported between Exchange and Domino. Please cancel and recreate the meeting."	For recurring meetings between Exchange and Domino, you cannot change the entire series after an instance of the meeting has been changed.	
BTNDR20="The number of updates made to this meeting exceeds the limit supported between Domino and Exchange. Please cancel the meeting and recreate it."	In the ICS file, a VEVENT is used to define a calendar event. Integration for Notes does not support more than one VEVENT in a single ICS file.	

Default Reason Code	Explanation	Valid Keyword
BTNDR21="Your meeting update could not be processed due to an uncorrectable error. Please cancel the (entire) meeting and recreate it."	The ICS file is encoded in MIME as Quoted Printable Text. This is not a supported type. This is defensive code for a scenario found in a customer's production environment. Although we had the offensive ICS file, we were not able to reproduce, or determine the root cause.	
BTNDR22="Dear User,\r\n\r\nThe delegation (forwarding) of your invitation is not currently supported.\r\nPlease request that the chairperson invite the intended delegate.\r\n\r\nOriginal invitation information:\r\n\r\n\tSubject: %SUBJECT%\r\n\tDate: %DATE%\r\n"	An Exchange user is invited to a meeting and delegates (forwards) that meeting to a Domino user. Meeting delegation functions differently between Domino and Exchange and cannot be supported.	%SUBJECT%, %DATE%
BTNDR23="Creating a recurring meeting with the option to move it if it occurs on a non-workday can only be supported if the meeting is a daily meeting. Please cancel and recreate the meeting specifying Don't Move if the meeting occurs on a non-workday."	The Notes user specified to move the meeting if it occurs on weekend for a non-daily recurring meeting. The Notes user can only choose "Don't move".	
BTNDR24="Adding an Exchange user to an existing meeting cannot be supported between Domino and Exchange. Please cancel and recreate the meeting with the appropriate invitees."	The Domino user added an Exchange user(s) to an existing meeting. This can only be supported if GRIP is configured in the coexistent environment.	
BTNDR25="Creating a meeting that occurs monthly by date, and selecting more than one date per month cannot be supported by Exchange. Please cancel and recreate the meeting using one date per month, or use an alternative recurring pattern."	The Notes user specified more than one date when choosing the Monthly by Date option. The Notes user can only choose one date.	
BTNDR26="Creating a meeting that occurs monthly by day, and selecting more than one day per month cannot be supported by Exchange. Please cancel and recreate the meeting using one day per month, or use an alternative recurrence pattern."	The Notes user specified more than one day when choosing the Monthly by Date option. The Notes user can only choose one day.	
BTNDR27="Rescheduling an instance of a meeting to occur after another scheduled instance of the series cannot be supported between Domino and Exchange. Please cancel and recreate the meeting series."	The Domino user tried to reschedule an instance of a recurring meeting after another scheduled occurrence.	

Default Reason Code	Explanation	Valid Keyword
BTNDR28="Rescheduling an instance of a meeting to occur before another scheduled instance of the series cannot be supported between Domino and Exchange. Please cancel and recreate the meeting series."	The Notes user tried to reschedule an instance of a recurring meeting before another scheduled occurrence.	
BTNDR29="Exchange Rooms and Resource must be placed in the "To:" field to ensure proper functionality."	The Domino user tried to schedule a meeting and specified an Exchange resource in the Resource field. Exchange resources must be added in the "To:" field.	%RESOURCENAME%
BTNDR30="Exchange Rooms and Resource must be placed in the "To:" field to ensure proper functionality."	The Domino user tried to schedule a meeting and specified an Exchange room in the Room field. Exchange resources must be added in the "To:" field.	%ROOMNAME%
BTNDR31="Rescheduling a recurring meeting and specifying that the reschedule applies to "This instance and all previous instances" or "This instance and all future instances" cannot be supported between Domino and Exchange. Please cancel and recreate the meeting."	The Domino user specified either "This instance and all previous instances" or "This instance and all future instances" when rescheduling a meeting. This is not supported. The Notes user can only reschedule the entire series or just a single occurrence.	
BTNDR32="Creating a recurring meeting using a custom recurrence pattern cannot be supported by Exchange. Please cancel and recreate the meeting using a non-custom recurrence pattern."	The Notes user specified a recurring meeting using custom dates.	
BTNDR33="This email cannot be processed by the system that manages coexistence between Domino and Exchange, because the domain (@domain.com) is not configured. Please report this to your technical support organization."	The Domino user attempted to send a mail item to a Foreign Domain that is not configured for BTExchangeDomain or BTAltExchangeDomains.	%DOMAINNAME%
BTNDR34="Rescheduling the entire series of a meeting after one or more occurrences have been rescheduled cannot be supported between Domino and Exchange. Please cancel and recreate the entire series."	The Domino user rescheduled one or more individual occurrences of a recurring meeting, and is now trying to reschedule the entire series.	

Default Reason Code	Explanation	Valid Keyword
BTNDR35="Rescheduling a recurring meeting using the Monthly by Day recurrence pattern cannot be supported between Domino and Exchange. Please cancel and recreate the meeting using an alternative recurrence pattern."	The Domino user attempted to reschedule a meeting using the Month by Day option.	
BTNDR36="Adding an Exchange user to this meeting cannot be supported, because there have been too many changes to the meeting. Please cancel and recreate the meeting."	The Domino user attempted to add Exchange users to an existing meeting and the number of exceptions exceeds BTAddUserExceptionsMax. This required GRIP to be configured.	
BTNDR37="Your attempt to add an Exchange user to this meeting could not be processed at this time. Please cancel and create the meeting with the appropriate invitees."	The Domino user attempted to add Exchange users to an existing meeting and BTCal could not get the original invitation information before BTAddUserDelayMax has expired. This could be due to network or server issues. This required GRIP to be configured.	
BTNDR38="Adding an Exchange user to this meeting cannot be supported, because there have been too many changes to the meeting. Please cancel and recreate the meeting."	The Domino user attempted to add Exchange users to an existing meeting that had exceptions and exceptions are not allowed. This requires GRIP to be configured.	%EXCEPTIONCOUNT%
BTNDR39="This meeting reschedule cannot be properly processed between Domino and Exchange. Please cancel and recreate the meeting."	The Domino user attempted to reschedule a meeting, and BTCal could not find the meeting in the cache database. Cache.nsf may be corrupt, or the document may not be in the expected cache folder. This is the same as BTNDR41, but in a different place in the code.	
BTNDR40="This meeting reschedule cannot be properly processed between Domino and Exchange. Please cancel and recreate the meeting."	The Domino user attempted to reschedule a meeting, and BTCal could not open the meeting in the cache database. Cache.nsf may be corrupt.	
BTNDR41="This meeting reschedule cannot be properly processed between Domino and Exchange. Please cancel and recreate the meeting."	The Domino user attempted to reschedule a meeting, and BTCal could not find the meeting in the cache database. Cache.nsf may be corrupt, or the document may not be in the expected cache folder. This is the same as BTNDR39, but in a different place in the code.	

Default Reason Code	Explanation	Valid Keyword
BTNDR47=" This meeting change cannot be supported between Outlook and Notes. Please cancel and recreate the meeting to ensure that the Notes invitees are properly updated."	The meeting between Outlook and Notes cannot be opened in BTCache.	
BTNDR49= "An encrypted copy of the message could not be delivered to the following Domino Group(s): %GROUPLIST%.\r\nPlease re - send the message using individual recipients."	An encrypted copy of the message could not be delivered to the listed Domino Groups.	
BTNDR50= "An encrypted copy of the message could not be created for the following Notes recipient(s): %RECIPIENTS%.\r\nPlease contact the HelpDesk."	An encrypted copy of the message could not be created for the listed Notes recipients because there was not a Public Key in their Person Document.	
BTNDR51= "An encrypted copy of the message could not be delivered to the following Notes recipient(s) : %RECIPIENTS%.\r\nPlease contact the HelpDesk."	An encrypted copy of the message could not be delivered to the listed Notes recipients because the Public Key was not valid.	
BTNDR52= "This meeting contains more text than BTCal can process for Domino users.\r\nPlease recreate it using less than 25K of text."	The meeting contains more than 25K of text.	

To customize the text of a reason code add BTNDR##= to the Notes.ini followed by your custom text

Examples:

- BTNDR30=This is a custom reason code, using the keyword for a room %ROOMNAME%

- For reason codes requiring more than one line of text, append ".#" to the notes.ini parameter. As with BTMULTISCHEDREPORTTEXTx, \n and \t must be used to insert the end on the line of text and a tab (respectively). For example:

  BTNDR29.1=first line of the reason code text\n

  BTNDR29.2=the second line of the reason code text\n

  BTNDR29.3=the third line of the reason code text\n

  BTNDR29.4=the fourth line of the reason code text\n

There is no limit on the number of lines a message may span; however, there is a 64K size limit for all lines of text combined.

Appendix L: Cross Platform Delegation

This section describes how calendar delegation behaves between Domino and Exchange, as well as what remediation options are available in CMTC.

There are two types of delegation; delegating a meeting to another person, and delegating calendar privileges to another person.

In Domino, you may delegate a meeting to another person by selecting **Delegate** under the **Participant Actions** dropdown menu. Although there is an option to be kept informed of updates, the act of delegating in this scenario general means that the original invitee is no longer invited to the meeting.

In Exchange, a similar result is achieved by forwarding a meeting to another person. In this scenario, the original invitee continues to be a full participant of the meeting.

Despite the similarities of these actions, the internal processing is quite different and it is not possible to achieve fully transparent functionality across platforms. The below table outlines the expected behavior of delegating/forwarding meetings in a Coexistent environment.

There are six different general scenarios for cross-platform delegation:

1. Notes Chairperson invites Notes User who delegates to an Outlook User

2. Notes Chairperson invites Outlook User who delegates to a Notes User

3. Notes Chairperson invites Outlook User who delegates to an Outlook User

4. Outlook Chairperson invites Outlook User who delegates to a Notes User

5. Outlook Chairperson invites Notes User who delegates to an Outlook User

6. Outlook Chairperson invites Notes User who delegates to a Notes User

For purposes of this document, the following terms will be used:

- Delegator - the person who delegates a meeting to another user
- Delegate - the person to whom the meeting is delegated

Integration for Notes can be configured to detect forwarded invitations from Exchange to Domino, and to return an NDR when found. This is the recommended behavior. This feature is enabled via the BTDelegateNDR parameter. The parameter accepts a value of Y or N, with Y being the default. Therefore, by default, this feature is enabled.

Notes Chairperson invites Notes User who delegates to an Outlook User

In this scenario, delegation functions as expected. The chairperson is notified, and the Outlook delegate is an invitee of the meeting. There is no action taken by Integration for Notes.

Notes Chairperson invites Outlook User who delegates to a Notes User

In this scenario, when the Outlook User forwards the meeting to a Notes User, an NDR will be returned to the Outlook User. The NDR instructs the user to notify the Chairperson that the attempted delegate should be added to the meeting. Once the delegate is added to the meeting, workflow functions as expected for an invitee.

Note: If BTDelegateNDR=N, the Domino delegate will receive the forwarded meeting, and can accept the meeting. However; any updates to the meeting will appear as a new meeting and workflow will not

function properly. Depending on the meeting type and the changes made, the results can be duplicate calendar entries, deleted calendar entries, missing meeting updates and un-actionable meeting updates.

Notes Chairperson invites Outlook User who delegates to an Outlook User

When the Outlook delegate acts on the invitation (accept/decline), he becomes an unknown invitee of the meeting. The Notes Chairperson's calendar will not be updated, and no subsequent workflow is ever sent to him. Subsequent workflow (reschedules/cancels) is only sent to the delegator. For the delegate to receive any subsequent workflow, the delegator must continue to forward any meeting notifications.

Since the forwarding action is restricted to the Exchange system, Integration for Notes cannot take any action to remediate the result.

Note: If the Outlook recipient has configured the second Outlook User as a delegate to their calendar, forwarding will work as expected.

Outlook Chairperson invites Outlook User who delegates to a Notes User

In this scenario, when the Outlook User forwards the meeting to a Notes User, an NDR will be returned to the Outlook User. The NDR instructs the user to notify the Chairperson that the attempted delegate should be added to the meeting. Once the delegate is added to the meeting, workflow functions as expected for an invitee.

Note: If BTDelegateNDR=N, the Notes delegate can accept the forwarded meeting invitation. The Outlook chairperson is correctly notified, and the Notes delegate is added as an optional attendee. Although this scenario functions as expected, Binary Tree still recommends that BTDelegateNDR be set to Y to prevent Outlook users from forwarding invitations chaired by Notes users. There is no identifying information in forwarded calendar items from Exchange to Domino that can discern the mail system of the chairperson.

Outlook Chairperson invites Notes User who delegates to an Outlook User

In this scenario, the following issues will occur:

- When the Outlook delegate accepts the invitation, he becomes an optional invitee of the meeting.

- The Outlook Chairperson receives the delegation notice, which is interpreted it as a tentative acceptance from the Notes delegator. The Notes delegator is still seen as a required invitee.

- Subsequent workflow (reschedules/cancels) will be sent to both the delegator and the delegate.

- When the Notes delegator receives the subsequent workflow, he cannot act on them (since it was delegated to another user).

Note: There is no identifying information in the delegated item sent from Domino to Exchange that would enable Integration for Notes to take remediation action.

## Outlook Chairperson invites Notes User who delegates to a Notes User

In this scenario, the following issues will occur:

- When the Notes delegate accepts the invitation, he becomes an optional invitee of the meeting.

- The Outlook Chairperson receives the delegation notice, which interpreted as a tentative acceptance from the Notes delegator. The Notes delegator is still seen as a required invitee.

- Subsequent workflow (reschedules/cancels) will be sent to both the delegator and the delegate. However, the Notes delegator cannot act on them (since it was delegated to another user).

- When the Notes delegate receives subsequent workflow (e.g., reschedule), it is treated as a new meeting. Therefore, both the original meeting and the rescheduled meeting appear on the delegate's calendar.

Since the forwarding action is restricted to the Domino system, Integration for Notes cannot take any action to remediate the result.

Appendix M: BT Stats Database

The BT Stats database provides a way to view all ZApp and NDR items in a single view. The database can also be configured to display all successes of BTCal calendar processing. Administrators may find this useful for troubleshooting.
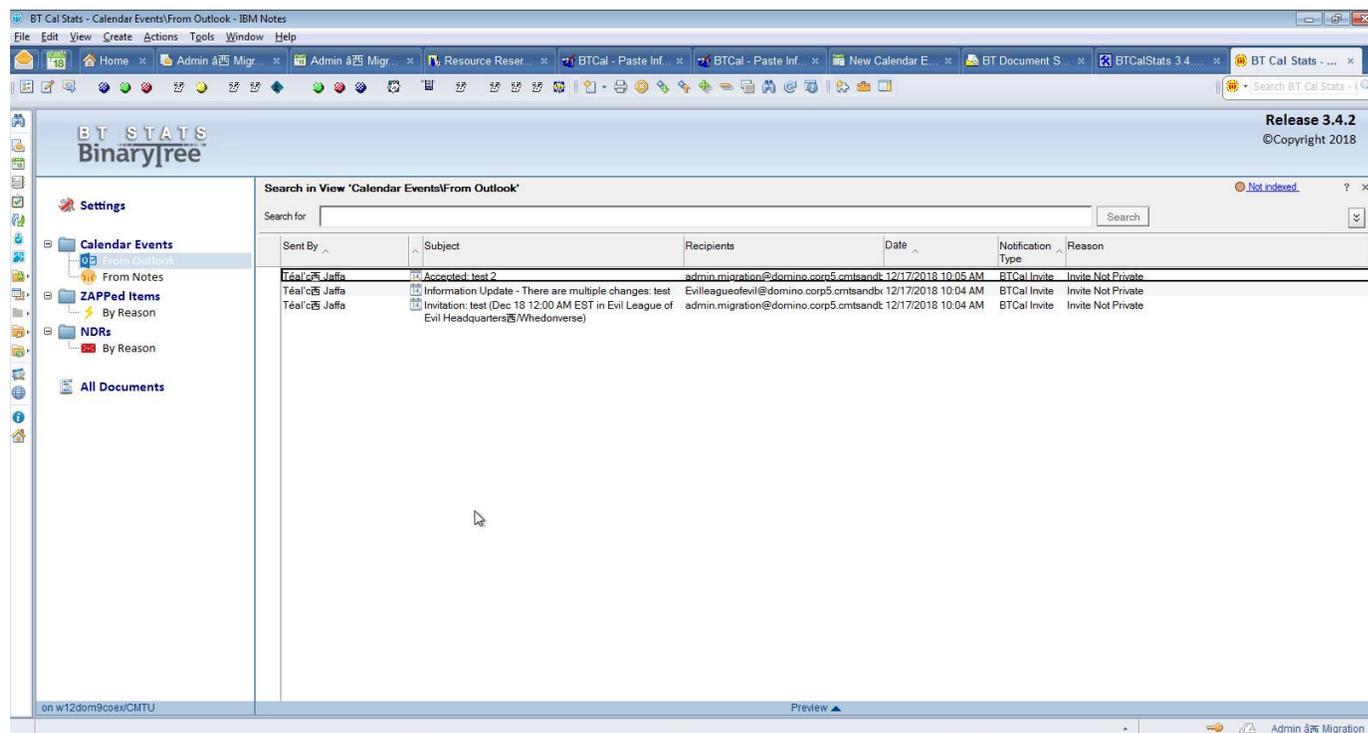
BT Stats has a number of a views that allow administrators to view messages **From Outlook** and **From Notes**; Notes-to-Outlook **ZAPPed Items** (**By Reason**); and NDRs. The database view includes the following columns:

- Sent By – User Name
- Reason – User friendly reason for NDRs or ZApp
- Recipients – List of all meeting invitees
- Date - Date/time sent to user
- Notification Type – NDR or ZApp

The BT Stats database can be configured by changing the following NOTES.INI settings:

BTSTATSDB

Default = btcalsta.nsf

By default btcalsta.nsf is the file name of the BT Stats database.

BTCALSTATSNDR

Accepted value = 0/1

Default = 1

Details of all NDR notifications appear in the view. This parameter is enabled (value set to "1") by default.

BTCALSTATSZAPP

Accepted value = 0/1

Default = 1

Details of all ZApped items appear in the view. This parameter is enabled (value set to "1") by default.

BTCALSTATSNOCHANGE

Accepted value = 0/1

Default = 0

This parameter can be enabled to log all successes of BTCAL calendar processing (messages not changed by ZApp or BTCal). This parameter is disabled (value set to "0") by default.