

Quest® InTrust 11.6.0

Release Notes

November 2023

These release notes provide information about the Quest® InTrust release.

About this release

Quest® InTrust delivers an enterprise-scale event log management solution for multi-location heterogeneous environments.

New features

New features in InTrust 11.6.0

- Added support for Windows Server 2022 compatibility

i **NOTE:**

Intrust 11.6.0 does not support Windows Server 2012 and 2012 R2. With Microsoft ending support for Windows Server 2012 and 2012 R2, it is recommended that all users should upgrade to supported versions of Windows Server to avoid security related issues.

- Added support for SQL Server 2022
- Autorun installer functionality has been replaced with AeCDSuiteLauncher
- Open SSL 3.1.2 support
- FIPS Version 3.0.8 support

See also:

- [Resolved issues](#)

Enhancements

Table 1: Enhancements in InTrust 11.6.0

Enhancement	Issue ID
-------------	----------

Table 2: Enhancements in InTrust11.5

Enhancement	Issue ID
-------------	----------

Resolved issues

The following is a list of issues addressed in InTrust 11.6.0

Table 3: Resolved issues in InTrust 11.6.0

Resolved Issue	Issue ID
Fixed the "Critical repository services configuration error" that is shown after changing the password using adcorpwd tool after upgrade	412019

Table 4: Resolved issues in InTrust 11.5

Resolved Issue	Issue ID
Data merging in repository fails as some segments in Hot\$ folder get corrupted due to wrong index value.	4968244-1
Some users were facing Agent crashes in their environment. This was caused because description of some event logs was empty.	241086

Known issues

The following is a list of issues, including those attributed to third-party products, known to exist at the time of release.

Table 5: Installation known issues

Known Issue	Issue ID
You may face a known issue while performing an installation/upgrade over an existing version of Intrust, as below: <code>Error: System.Web.Services.Protocols.SoapException:The value of parameter 'Data Sources' is not valid.</code> Workaround: Proceed by clicking 'Ok' on the system prompt during the upgrade.	374445
During Upgrade, the IT monitoring console throws fatal error Workaround: <ol style="list-style-type: none">1. Open IIS (Internet Information services)2. Expand Server > Sites > Default website > IT Monitoring3. Left Click on IT Monitoring and click on remove OR	315800

Known Issue	Issue ID
While Installing InTrust, assign new Virtual directory to InTrust Monitoring Console.	
<p>Prerequisites are not checked correctly by the installers of InTrust Knowledge Packs for the following systems:</p> <ul style="list-style-type: none"> • VMware • Recovery Manager for Active Directory • Active Roles <p>If you try to install one of these Knowledge Packs on a computer that is not an InTrust server, setup does not prevent this as it should. When the installation fails, you get the following cryptic error message:</p> <p>"Data source name not found and no default driver specified"</p>	IN-7234
<p>Some administrative PowerShell activity such as Remote Desktop Web Services installation could be considered as suspicious and, as a result, can trigger some actions defined by suspicious activity rules.</p> <p>Workaround: Quest recommends adding the accounts that will run such installations as trusted users (in the Whitelist parameter of the suspicious activity rule). To add a user account to the whitelist, navigate to InTrust Manager Real-Time Monitoring Rules Advanced Threat Protection Windows/AD Suspicious Activity PowerShell Suspicious PowerShell activity, open rule properties and change the user whitelist parameter on the Matching tab. Provide the account data in the following format: <domain name>\<user name>.</p>	—
<p>If you are installing InTrust on a SQL server and updating SQL Server Native Client through the InTrust setup suite in the process, this causes the locally installed SQL Server service to restart automatically.</p> <p>To avoid this, update the client to the required version before you set up InTrust.</p>	733727
<p>You will have to log off and log on again once you have installed InTrust Manager to a location other than default. Otherwise, the InTrust Manager shortcut will not work.</p>	0112449
<p>If you have used the Add/Remove Programs dialog to uninstall InTrust, you will get the Modify/Repair/Remove dialog next time you launch InTrust setup from the CD. Click Remove and wait until setup finishes, then run setup again.</p>	0112184
<p>You may get the following error while trying to install InTrust:</p> <pre>Cannot grant the following privileges: Back up files and directories Log on as a service to <account_name> Your Group Policy settings may be preventing setup from granting the privileges specified.</pre> <p>There must exist a Group Policy that controls the assignment of the specified privilege(s) in your environment. InTrust setup can neither override it nor check if the account inherits the required privilege(s) from a security group the policy applies to. Make sure the policy grants the specified privilege(s) to InTrust service account, either directly or through its membership in a security group, and click the Ignore button in the error dialog to proceed with the installation.</p>	0112303, 0112218
Support for ITMonitoring Console in Microsoft Edge	375374

WorkAround

1. Open Edge, click on three dot icons on the top right corner.
2. Click on Settings tab.
3. Select the Default Browser present in left panel.
4. Click on the dropdown in "Allow sites to be reloaded in Internet Explorer mode (IE mode)" and select "Allow".
5. Click on the Add button which is appeared after completing 4th step.
6. Copy the URL you want to run and paste it into the box present below "Enter a URL:" and click ADD.
7. Click on Restart.

InTrust Monitoring Console and Quest Knowledge Portal cannot be installed into a Virtual Directory with special characters (like !#\$%^&()_+[]{};,-='~) in the name. 0117312

If you receive the following error while upgrading an InTrust Server: 0122748,
363775

Error Code: 1603 Fatal error during installation.

Error 0x000006BE occurred. Exiting.

First of all, check if all of the InTrust Server services have been stopped. Most often, it is Quest InTrust Real-Time Monitoring Server service that takes long to stop and causes the setup to fail with this error. If this is the case, quit the setup, make sure all of the Quest InTrust services have stopped and run the setup again.

If you receive the following error at InTrust setup: 0122347,
54080

Cannot configure default Audit Database. Error code: 0x80004005.
Property value is invalid. Make sure the value is typed correctly.
Unspecified error Multiple-step OLE DB operation generated errors. Check each OLE DB status value, if available. No work was done. Property value is invalid. Make sure the value is typed correctly.

Check if you have specified a database with a name that starts with a numeric character (0-9) as either Audit or Alert database. The names of all InTrust Audit and Alert databases must start with an alphabetic character (a-z, A-Z).

On the Select Features step, InTrust setup wizard displays the required disk space only for the features you select in the tree. There are, however, some features required by those listed in the tree but not shown there because they are not user-selectable. Those 'hidden' features affect disk space requirements too. Click the Disk Cost button to see the more accurate numbers for required disk space calculated with regards to the features not displayed in the tree. 0112182,
0112212

When InTrust installation fails and is rolled back, some registry keys it has created are not removed. This is controlled by the Microsoft Installer and cannot be handled from the InTrust setup code. 0112227

When you are running the **configdb.sql** SQL script on a pre-created InTrust configuration database to provide for not giving InTrust service account the database owner right for it, you 0152107

Known Issue**Issue ID**

may receive warnings like the following:

Cannot add rows to sysdepends for the current stored procedure because it depends on the missing object 'dbo.ITRTProcessingRule_change'.

These warnings may be ignored since they do not indicate of any problems that may affect the future InTrust operation.

Don't specify any existing Quest Active Roles Server database as the InTrust configuration database, since these two products have incompatible requirements to the system configurations of their databases. 0153990

Components and configuration objects added to an existing InTrust installation by installing an individual Knowledge Pack cannot be consistently removed from InTrust by deselecting the related nodes on the 'Select Features' step of the Installation Wizard. 0153504

When you install InTrust or upgrade it from an earlier version, you may receive the following error message: 0156239

Error 1335. The cabinet file <cab_file_name> required for this installation is corrupt and cannot be used. This could indicate a network error, an error reading from the CD-ROM, or a problem with this package.

If this happens, try making a local copy of your InTrust distribution on the computer where you are performing the installation and starting setup from there.

If you have individual InTrust components installed on a computer to a non-default path, be sure to not use the InTrust Suite setup to add other InTrust components to that machine. Install additional InTrust components by running their individual setup (.MSI) packages from the product DVD instead. This will let you avoid problems at both installation and uninstallation of those components in the future. 0184325

When you change the installation path for the InTrust Server node of the feature tree (on the Select Features step of the Quest InTrust Setup wizard), installation paths for features down the tree is changed accordingly so that individual InTrust components are installed to subfolders of the folder you specify for InTrust Server. **Note** that this, however, does not apply to Quest Knowledge Portal, which does not inherit its installation path from the InTrust Server component and requires that you explicitly change the installation path if you need that. 0190311

It is recommended that you install the same set of InTrust components on all InTrust Servers in an InTrust Organization. Otherwise, you may have problems, for example, when switching the server that runs a task. 0149166

When you install a report pack and the SQL Server hosting its target database does not have SQL Server Agent running, you may receive the following warning, sometimes followed by an error dialog with the same text: 41900

Cannot upload report pack: For Temporary Tables Clean-Up job schedule to be applied, make sure that: 1. Authentication method for database access uses the explicitly specified credentials which are stored in the data source (either SQL Server authentication, or Windows authentication). If Integrated Windows authentication i...

When you click **OK** in this dialog, another error message may be displayed asking you if you want to continue with the setup. Click **No** and wait for the setup application to prompt you with

Known Issue	Issue ID
<p>the options to Retry, Ignore or Abort the installation. When prompted, select Retry. From this point on, the installation of the report pack is expected to run smoothly.</p>	
<p>You may receive one of the following error messages when you install the Knowledge Pack for Microsoft Audit Collection Services (ACS KP) from the command line:</p> <ul style="list-style-type: none"> • Error: 0x80040154. Cannot install ACI packages. Reason: Class not registered. • Error: 0x80070005. Cannot install ADC predefined objects. Reason: Error while performing the following action: Enumerating collection. Reason: Access is denied. 	60118
<p>This is not expected to happen again if you click OK in each error dialog window, let the installation process exit and run the knowledge pack installation command one more time. [Trend view] Ensure "Exclude" works in trend view.</p>	
<p>You may receive the following misleading error message when installing an additional Knowledge Pack into an existing InTrust organization:</p> <p>Error: 0x80004005. Cannot configure default Audit Database. Reason: Data source name not found and no default driver specified.</p> <p>This error is not expected to cause any real problem with a Knowledge Pack installation. If you see it, click OK in the error message and let the installation finish. No troubleshooting is required unless you see more errors during the installation or find the Knowledge Pack not working properly when installation is finished.</p>	72729
<p>InTrust suite installation program cannot automatically discover an Exchange Server in domain trusted by the domain the InTrust Server computer is a part of.</p>	81962
<p>When you use the default InTrust setup, the installation program does not prompt you for the Communication Port number. If you use the extended InTrust setup to complement a default deployment, you are prompted for the Communication Port value but the setting you make is not applied to the InTrust installation. In this installation scenario, edit this registry value to change the Communication port number after InTrust is installed, if needed:</p> <pre>[HKEY_LOCAL_MACHINE]\SOFTWARE\Aelita\ADC\RpcServer\Endpoints\1</pre> <p>or</p> <pre>[HKEY_LOCAL_MACHINE]\SOFTWARE\Wow6432Node\Aelita\ADC\RpcServer\Endpoints\1 STRING: Endpoint="8340"</pre>	83259
<p>It is not recommended to create InTrust configuration database with "." symbol in its name (for example: InTrust_10.6_ConfigDB), though it will be created, such database is unusable and you will receive the error like:</p> <p>Invalid database name supplied.</p>	83628
<p>Sometimes uninstalling an InTrust component can cause miscellaneous problems for another InTrust component on the same computer. If this happens, open the Programs and</p>	85489, 85552

Known Issue	Issue ID
Features facility in the Control Panel and perform a Repair operation for the component that is not working properly.	
The "InTrust Monitoring Console" feature cannot be installed if the ASP record is corrupted. If this happens, reinstall the ASP Windows feature (Internet Information Services World Wide Web Services Application Development Features ASP in the Windows Features facility) by removing it and adding it again.	85694

Table 6: Upgrade known issues

Known Issue	Issue ID
If you have customized the default alerting profile in Monitoring Console, then upgrading InTrust deletes the profile.	IN-8597
In some rare situations, if InTrust fails to apply a real-time monitoring policy, this creates an invalid configuration, and other real-time monitoring policies cannot be applied anymore. As a result, real-time monitoring and real-time collection stop working, but there are no error messages to indicate it. This can occur in InTrust organizations where some servers have been upgraded and some haven't, and an upgraded server makes configuration changes that are not recognized by the older servers. If it happens, try the following steps: <ol style="list-style-type: none"> Note down the settings of all real-time monitoring policies, then delete the policies and commit the change. Note down the settings of all real-time collections in InTrust Deployment Manager and delete the collections. Recreate the real-time monitoring policies with the settings from before. Recreate the collections in InTrust Deployment Manager with the settings from before. 	IN-11597, IN-11588
If you have performed an upgrade from version 11.3.1 or earlier without deleting the "Redhat Linux Syslog" data source (as recommended in the Upgrade Guide), then you will still have the old version of this data source after the upgrade. To update the data source in this situation, take the following steps: <ol style="list-style-type: none"> In InTrust Manager, make a backup copy of the "Redhat Linux Syslog" data source. Delete the original data source. Apply your changes by clicking the Commit button. Close InTrust Manager. Locate the Linux Knowledge Pack setup package LINUX_KP.*.*.*.msi in the InTrust\Server folder in your InTrust distribution and launch it and select Repair mode. <p>After the installation, the up-to-date version of the data source will be available.</p>	IN-3264
If any job in an InTrust task completes with a status other than success, then notification task jobs in the same task may send messages where the job list contains items with invalid job	IN-8603

Known Issue	Issue ID
<p>type designations. These are broken duplicates of valid items in the same list, and you can safely ignore them.</p> <p>This problem was fixed in InTrust 11.4 and doesn't occur in fresh installs of version 11.4 and later. However, upgrades from prior versions don't correct this, because the InTrust upgrade policy is not to overwrite any existing configuration objects.</p>	
<p>In the course of an upgrade, you may get the following error messages during repository indexing and searching:</p> <pre>Unknown field <field_name> referenced in log knowledge base as source of value.</pre> <p>This is caused by differences in log knowledge base definitions between the old and new InTrust versions. The problem should go away as soon as all InTrust components have been upgraded—not just InTrust Server, but also Repository Viewer and others.</p>	—
<p>When you upgrade an existing installation of InTrust under an account that doesn't have DBO access rights to the InTrust configuration database, you may receive the following error message:</p> <pre>Cannot uninstall CI packages. Error code: 0x80004005. Cannot parse ADCClassInventory query. Error of opening file.</pre> <p>Click OK and continue. This error does not affect the results of the upgrade.</p>	0156311
<p>At an upgrade of an InTrust Server in a multiserver InTrust organization, you may receive a misleading error message:</p> <pre>You are about to remove an InTrust server from an InTrust organization. Any jobs configured to run on this server must be manually transferred to another live server in the same organization.</pre> <p>It is safe to ignore this error. Click OK and continue upgrading.</p>	55161
<p>You may receive the following error when you attempt to upgrade Quest Knowledge Portal (QKP) as a part of your InTrust upgrade process:</p> <pre>The installer has insufficient privileges to access this directory: C:\Program Files\Quest Software\Knowledge Portal. The installation cannot continue. Log on as administrator or contact your system administrator.</pre> <p>To work around this error, click OK in the error message box, let the upgrade run to the end and repeat the upgrade of QKP.</p>	70709

Table 7: General known issues

Known Issue	Issue ID
<p>In a 2022 server machine, creating real time policy crashes the IM</p> <p>Workaround</p> <p>Step 1: Run System File Checker (sfc) scan</p>	415106

1. Type cmd in the search box, and then right click Command prompt select Run as Administrator.

```
C:\Windows\System32> sfc /scannow
```

1. Check the link to check for system file corruption.

```
C:\Windows\System32>dism /online /cleanup-image /checkhealth
```

```
C:\Windows\System32>dism /online /cleanup-image /scanhealth
```

```
C:\Windows\System32>dism /online /cleanup-image /restorehealth
```

Step 2: Reinstall the DLL

1. Type cmd in the search box, and then right click Command prompt select Run as Administrator.

2. Type this in command prompt:

```
regsvr32.exe /u ntdll.dll and press Enter key (this will uninstall the file)
```

```
regsvr32.exe ntdll.dll and press Enter key (this will reinstall the file).
```

3. Cleanup temp directory

4. Restart the Machine Again run the below command and see any corrupted files

```
C:\Windows\System32> sfc /scannow
```

```
C:\Windows\System32>gpupdate
```

5. Restart Quest services.

NOTE: Wait for 10-15 minutes, select InTrust Manager Run as Administrator.

Workaround 2

1. Create a Real time Monitoring policy without selecting operators event log message recipients in the Notification window.
2. Click on the Policy created in step 1 and click on **Properties**.
3. Click on **Event Log**.
4. Select '**Notifying the following operators**'.
5. Click on **Add**. InTrust Manager crashes.
6. Now try creating Real time Policy and select event log message recipients and add the operator.

If you get a lot of events with event ID 13650 in the InTrust Server log, this may mean that an attacker is trying to scan the open ports on the InTrust server. Consider blacklisting the IP addresses that occur in such series of events.

IN-13155

The event description contains the phrase "The system cannot find the file specified", which in this case is misleading and should be interpreted as the system being unable to connect to a socket.

In some data sources, particularly in the newer ones, named event fields are not associated with the original event fields as you might expect. Improvement of event definitions is an

IN-8039

Known Issue	Issue ID
ongoing process, and relevant mapping may be added for the events you need in future InTrust versions. To stay abreast of the event field mapping changes, check the Changes to Event Fields topic.	
When you open SQL scripts from the InTrust distribution (for example, configdb.sql) in SQL Server Management Studio, you get an "Inconsistent Line Endings" message. This message can be safely ignored.	IN-10257
You may get the following warning during gathering from VMware ESXi and vCenter servers: Cannot find the specified position in the event log. If this happens, consider gathering more frequently. This warning means events that came after the last gathered event were lost.	IN-10053
Some Windows Security log events with identical event IDs have variants with different layouts, where specific fields are added or reordered. The differences exist both among Windows versions and within the same Windows version. InTrust provides event field aliases for indexing and convenient searching, and this functionality relies on field ordering. InTrust has not always accommodated the event layout differences, and searching by affected fields may give you incorrect results. At this time, InTrust potentially has this issue with the following event IDs:	IN-7007
<ul style="list-style-type: none"> • In Windows Server 2016: 4616, 4624, 4654, 4656, 4661, 4663, 4688, 4728, 4732, 4746, 4751, 4756, 4761, 4785, 5125, 5140, 5451, 5452, 5632, 6272, 6273, 6274, 6275, 6416 • In Windows Server 2019 and Windows 10: 4616, 4624, 4654, 4656, 4661, 4663, 4688, 4728, 4732, 4746, 4751, 4756, 4761, 4785, 5125, 5140, 5451, 5452, 5632, 6272, 6273, 6274, 6275, 6416, 5058, 5059, 5376, 5377 	
The InTrust agent does not require Microsoft .NET Framework for most of its functionality and can be installed on a computer without .NET. However, some agent features, such as PowerShell script-based response actions, will not work on those computers.	IN-7255
Event forwarding configuration and repository indexing configuration are mistakenly coupled during failover activity. If either a forwarding server or an indexing server fails, then the failover rule will switch both the forwarding server and the indexing server, even if one of the servers is OK.	IN-4816
An InTrust server performs self-auditing correctly only if UAC is enabled on that server. Otherwise, some InTrust activity may not be audited.	IN-4170
When you create a repository, specifying a local path for it is not prevented, even though InTrust does not support locally-hosted repositories.	616837
Two InTrust servers cannot concurrently process each other using agents.	0115565
You may not be able to log on interactively to a computer where InTrust server is installed, if the InTrust configuration database went offline while restarting the computer. Wait until the database goes back online or for about 5 minutes, then try logging on again.	0115564

Known Issue	Issue ID
<p>Don't delete the Default configuration objects (Default databases, repositories, operators, etc.) even if you never use them in InTrust sites, policies etc. Other predefined objects may have references to the Default objects by default, which may result in hard-to-find errors if referenced objects no longer exist in your InTrust configuration database. Note that the deleted predefined configuration objects are not recreated at InTrust upgrades or reinstallations, some of them causing errors at the setup phase if missing from the configuration database.</p> <p>The recommended practice is to keep default configuration objects as templates for the custom ones you create for the routine use.</p>	0122083, 0122368
<p>If two operator records with the same computer name exist in the InTrust configuration and both are specified as operators to notify, then two NET SEND notifications are sent to that one computer.</p>	0112241
<p>When you restart InTrust services on an InTrust Server serving a large number of agents, real-time monitoring and gathering may require a few minutes to start working again after the services are started.</p>	0114831
<p>If notification is configured so that email is sent to an operator that represents a group and sending fails for one of the group members (for example, due to an invalid email address), then it also fails for all other members of the group.</p> <p>This issue does not occur if all selected operators represent individual users; in this case, sending failure for an operator does not affect other operators.</p>	0151967
<p>When the system time is set back on an InTrust Server computer or on a computer with InTrust agent running, InTrust agent-server operation may become unstable or even broken. It is recommended to restart InTrust services (either Quest InTrust Server or Quest InTrust Agent) on the computer after setting the system time back on it. Automatic time adjustment for daylight savings does not produce this effect on InTrust and does not require restarting any InTrust services.</p>	0145993
<p>The following error message logged to the session results of an InTrust task may indicate of a frequent changes in the system time on the InTrust Server computer:</p> <pre data-bbox="199 1249 1182 1435">Error: 0x80040e2f Cannot initialize the required component. Cannot initialize session. Sessions Error- The statement has been terminated. Sql State: 01000 Native Error Code: 3621 Violation of PRIMARY KEY constraint 'PK_ITGSessionsInfo'. Cannot insert duplicate key in object 'dbo.ITGSessionInfo'. Sql State: 23000 Native Error Code: 2627 , !! IDispatch error #3119</pre> <p>This may be happening because of some problems with hardware or operating system, frequent time synchronizations with multiple hosts on the network or some other reason.</p>	0155892
<p>If an InTrust site includes an AD site that has subnets misconfigured, InTrust may try processing, when monitoring or gathering from this InTrust site, a lot of unrelated computers or even all computers in the Domain(s) that the AD site spans.</p>	0130865
<p>You may be confused with events you may find in the InTrust event log on the InTrust Server computer stating that a job has completed with error and providing an error code without any error description. These events don't signal of any problem and may be ignored. They are logged to the InTrust event log in order to have process exit codes for InTrust jobs saved for the purpose of possible troubleshooting.</p>	0155885

Known Issue	Issue ID
<p>When you edit filters in data sources for IIS logs, ISAS logs, DHCP logs and Exchange events, and you want to use filtering by empty string value, specify empty strings. To do it, leave the text box in the Add/Edit String dialog box empty and click OK.</p>	0146236
<p>If you see a notification job failing consistently with the following error:</p> <pre>Object Name: (InTrust Server) Data Source: Notification Description: Cannot notify the 'Default Notification Operator' operator using the 'mail' notification type. An error has occurred during sending the mail. Error text: An established connection was aborted by the software in your host machine. Function 'recv' failed.</pre> <p>Verify that the SMTP server handling notification messages from InTrust does not require sender authentication.</p>	80101
<p>If you are using Windows 2012 running on an ESXi 5.0, 5.1, or 5.5 host, DO NOT USE e1000e default network adapter. This may lead data corruption may occur when copying data over the network and therefore cause problems with repository indexing. You may see the following errors in the log:</p> <pre>Indexing of long-term items for repository "\\y12r2\RepsG\20140321_CalcE5310_Corruption" failed. Reason: Operation failed on agent localhost. Reason: 'ADC Error: Error: ADC Error: Unspecified error, error code 0x8adc1005' Indexing of recent items for repository "\\y12r2\RepsG\20140321_CalcE5310_Corruption" failed. Reason: Operation failed on agent localhost. Reason: 'ADC Error: Error: ADC Error: Field stream is invalid, error code 0x80004005' Indexing of long-term items for repository "\\y12r2\RepsG\20140321_ CalcE5310_Corruption" failed. Reason: Operation failed on agent localhost. Reason: 'ADC Error: Error: ADC Error: ADC Error: ADC Error: One or more segments of incoming index data (\\y12r2\RepsG\20140321_CalcE5310_Corruption\IndexingRoot\$\indexes\{00000000-0000- 0000-0000-000000000000}\index\{7F}, \\y12r2\RepsG\20140321_CalcE5310_ Corruption\IndexingRoot\$\indexes\{00000000-0000-0000-0000-000000000000}\index\{AE}) could not be merged with the repository index, error code 0x8adc1005' The indexing queue of recent events in repository "\\y12r2\RepsG\20140321_CalcE5310_Corruption" exceeded the size limit. Please check the InTrust Server event log for errors, and consider collecting less audit data to this repository and adding more indexing servers.</pre> <p>For more information see the article "Possible data corruption after a Windows 2012 virtual machine network transfer (2058692)": http://kb.vmware.com/selfservice/microsites/search.do?language=en_US&cmd=displayKC&externalId=2058692</p>	84428
<p>When the InTrust server is switched during a failover operation, you get the following error in InTrust Deployment Manager and in the InTrust Server event log:</p> <pre>Some required components for working with the data source could not be installed</pre> <p>This message is about the user session tracking component of the InTrust agents. The agents may temporarily stop reporting user session events.</p>	85392
<p>Filtering of site objects by registry value works only with the 32-bit registry view on 64-bit systems.</p>	85545

Known Issue	Issue ID
Automatic cleanup is not implemented for the %ALLUSERSPROFILE%\Application Data\Quest Software and %ALLUSERSPROFILE%\Application Data\Quest folders. If these folders grow too large, you can safely clear their contents manually.	85686
User session tracking events contain extended information, including the IP address of the agent computer. However, the IP address can vary from event to event as network interfaces are added and removed dynamically. Keep this in mind if you rely on IP addresses when you search for events; otherwise, you may miss important events.	85661

Table 8: InTrust Deployment Manager known issues

Known Issue	Issue ID
In InTrust versions prior to 11.4.1 Update 1, it was a known issue that multiple repository cleanup schedules could be created for the same repository if multiple instances of InTrust Deployment Manager were editing the repository at once. This was resolved in InTrust 11.4.1 Update 1, but it can still happen if an old instance of InTrust Deployment Manager is editing a repository simultaneously with an up-to-date instance. If you experience this issue, simply set the cleanup schedule again in an up-to-date instance.	IN-11532
If event forwarding is enabled for a repository managed by InTrust Server 11.4.1 or later, then earlier versions of InTrust Deployment Manager show meaningless collection-wide errors for collections that use the repository. These errors can be safely ignored; they are actually incorrectly interpreted data from the forwarding engine's performance counters.	IN-7910
If any indexing errors occur for a repository, they are displayed in the error details dialog box for that repository until the repository-managing InTrust server clears them. However, if the server is removed from the organization before it can clear them, they stay indefinitely. Before you decommission an InTrust server, make sure you switch all indexing activity to another server that you plan to keep using.	IN-3989
Caution: When a previous-version InTrust Deployment Manager works with a repository managed by a current-version InTrust server, you should never modify the configuration of such a repository. Doing so may invalidate the repository configuration. The version of InTrust Deployment Manager must match or exceed the version of InTrust Server if you want to edit configuration.	IN-5782
In the Computers not in a collection search folder, the type of some non-Windows computers (such as VMware ESXi servers) is erroneously shown as "Workstation".	85403
In InTrust Deployment Manager, if you add objects to a collection through an LDAP query, you may get an object named "<data />" or "<data></data>". This happens if the returned object doesn't have the attribute that you specified in the LDAP query. To work around the issue, try using an attribute that your expected object is guaranteed to have.	IN-4914
If InTrust Deployment Manager is running on Windows 8.1, the "Next session start" field in repository cleanup options shows the scheduled time in the InTrust server's timezone instead of the local timezone.	IN-4901

Table 9: Event forwarding known issues

Known Issue	Issue ID
Event forwarding fails for repositories whose names are longer than 127 characters.	IN-14353
When you set up forwarding in InTrust Deployment Manager, sometimes the port text box may not recognize a valid value and may give you an incorrect prompt that the port cannot be empty. If this happens, just delete the value and retype it.	IN-10177
When you forward events with long insertion string values (such as encrypted PowerShell logs) using the UDP transport, forwarding may stop for the repository with those events, and you may get error messages like the following in InTrust Deployment Manager: <pre>A message sent on a datagram socket was larger than the internal message buffer.</pre> This problem doesn't occur if you use TCP to forward such events.	IN-4600
If the adcrpcs service is restarted on an InTrust server that forwards events, it may resend duplicates of recent messages.	85436
When the forwarding queue is cleared due to enforcement of retention policy, in rare cases InTrust may log invalid timestamps in events about deleted data. This happens in situations where special-purpose files are deleted. These files are used internally and don't contain audit data. You can safely ignore such events.	IN-3912

Table 10: InTrust Manager known issues

Known Issue	Issue ID
During rule response action creation in InTrust Manager, unnecessary white space is added by the field picker control. This causes response actions to behave incorrectly, because the specified strings don't match anything due to the white space.	IN-8598
Computers added to an InTrust site by their NetBIOS names may be listed under the Agents node in InTrust Manager by their NetBIOS names, not by their FQDNs as might be expected.	0111184
The lists of available InTrust Servers in an organization may differ depending on whether or not InTrust Manager is installed on the same computer as InTrust Server. The RPC Locator service should be enabled on the InTrust Manager computer where InTrust Server is not installed for correct results. A specific InTrust Server may be also not visible as available for connection with InTrust Manager if it fails to publish itself in Active Directory (AD). This may happen if the Quest InTrust Server service does not have sufficient rights (see the <i>System Requirements</i> document for details) to create a Service Connection Point (SCP) in AD. Check events logs, starting with the InTrust log, on the InTrust Manager and InTrust Server machines for events looking related to possible problem with the RPC Locator service and creating an SCP in AD, respectively. Besides, if you know that a specific InTrust Server is available, you can connect to it by specifying it manually, whether or not it is on the list.	0144041
If an InTrust task has the starting date in its schedule set to some day before the date when	0154835

Known Issue	Issue ID
<p>the system switches to the daylight-saving time, it will begin starting one hour later than the start time specified in its schedule when the system switches to DST. A task with its starting date in the DST period starts one hour earlier than specified in the properties of its schedule when the system switches to the standard time. When the time is adjusted back, the actual local time the task starts at will match its start time specified in its schedule again.</p>	
<p>You may receive the following error:</p> <pre>Internet Explorer Script Error: 'm_idBalloon.style' is null or not an object</pre> <p>when you have the Quick Start node selected in the left pane and click the right pane. You must be clicking there too early. Wait for the content of the right pane to be fully loaded before you click it.</p>	0185734
<p>Quick Start will fail to generate reports you specify if InTrust is configured to use SRS running on a computer different than SQL Server machine hosting the InTrust database(s) you are trying to report on, and Windows authentication is used to connect to Reporting Services. The following error message will be received:</p> <pre>Login failed for NT AUTHORITY\Anonymous Logon.</pre>	0177740
<p>When you edit settings of an existing consolidation job and change the source repository, InTrust Manager doesn't prompt you for a new set of repository objects to be copied. Make sure to review the objects selected for processing in the new repository.</p>	41513
<p>When InTrust is running in the Object Level security mode, the InTrust Manager snap-in may crash at an attempt to run Quick Start wizard under an account that does not have the Modify permission on either the Sites or Gathering node, or neither.</p>	48615

Table 11: Workflow and session known issues

Known Issue	Issue ID
<p>The If the task is still running, stop it at this time option in the task's Advanced Schedule Options dialog box does not work. Instead, use the Stop the task if it runs for option.</p>	0112061, IN-8674
<p>At least 5 minutes must pass between committing a change made to a task and its scheduled start. For example, if you modify a task and commit the configuration at 8:40, then schedule the task to begin no sooner than 8:45. Otherwise, the task will fail to start.</p>	0112041
<p>Tasks with identical names may fail. Avoid creating such tasks.</p>	0112240
<p>The Application job may seem to be not responding while the application it launches is running. Wait until the application is completed.</p>	0112045
<p>Do not use UPN-style account names (testuser@test.abc.com).</p>	0112049
<p>If InTrust Servers in an Organization are concurrently running too many tasks, you may receive the following error in results of some sessions:</p> <pre>"Components Manager: Failed to find Storage Accessors. Error=0x80004005: Timeout expired. Unspecified error."</pre> <p>This happens because each task accesses InTrust Configuration database, and some of them fail to do that because of query timeout expiration. If you cannot reduce the number of task that run concurrently, consider increasing the value of the timeout setting on the SQL</p>	0111825

Known Issue	Issue ID
Server level using the sp_configure stored procedure.	
When you create an Application job, clicking the Browse button for Working Directory may not work and result in an error message. If this happens, type in the full path to the working directory instead of browsing for it.	0120361
A session for an InTrust job of the Windows Scheduled Task type configured to run a scheduled task that fails to start will be logged as successful if the job has the 'Synchronous operation' option disabled.	0149467
If a job finishes with an error, its session information may contain the error code without an error description.	0155885
An InTrust job of the Windows Scheduled Task type can be configured to run a task only if the task meets <i>both</i> of the following requirements: <ul style="list-style-type: none"> The task is set up with the Windows Server 2003, Windows XP, Windows 2000 compatibility option enabled (in the Configure for drop-down list in the scheduled task properties). This is available only if you use the Create Task action, not the Create Basic Task action. The task is located in the Task Scheduler Library, and not in its subfolder. <p>If either condition is not met for a scheduled task on the computer where you are looking for it, you will not see it in the Select Windows Scheduled Task dialog when you run the New Job Wizard in InTrust Manager.</p>	52816, IN-3561

Table 12: Agent known issues

Known Issue	Issue ID
The agent.ini file, which contains the configuration of the InTrust agent, uses the UTF-8 encoding on Windows. Editing this file manually on Windows is strongly discouraged, because it is easy to change the encoding and make the agent configuration invalid.	IN-12999
If an agent consistently fails to start on a Windows machine, and you find the following error in the local Application event log: <p>InTrust agent stopped unexpectedly. Error occurred: An attempt was made to access a socket in a way forbidden by its access permissions. (Win32 error: 10013). or the following error from the agent process is written to syslog on the Unix machine hosting an InTrust agent: InTrust agent stopped unexpectedly. Address already in use (CRuntime error: 98).</p> <p>Check if any other active process (application, service, daemon) is configured to listen on the port you are going to use as the InTrust agent communication port on this machine (TCP port 900 by default). If you find some, reconfigure either the agent or the other application/service/daemon to use a different port. To change the communication port setting for InTrust agent, edit the agent.ini file located in the agent folder.</p>	55548
If an agent has been installed manually, then uninstallation should also be performed manually rather than from InTrust Manager.	0111578
You may have to uninstall the agents manually, if the InTrust Server to which the agents belonged is uninstalled. To avoid this, uninstall the agents from InTrust Manager prior to	102815

Known Issue	Issue ID
removing the server.	
When agents are used to gather audit data, the following error may occur:	0111596
Agent has not yet established connection to the InTrust Server (0x8adc2c09).	
This situation may occur due to network problems, or when InTrust services have just been restarted, and agents have not communicated to the InTrust Server yet.	
You may get several agent errors, if there's no free disk space on the computer where the InTrust agent is installed. For example: ADC Error: User not found (0x8adc3207), (0x8adc2c05)	0111560
An attempt to manually register an agent on an InTrust server may fail with the following error message:	0117194
'Cannot register agent on the InTrust server <...> No connection could be made because the target server actively refused it. <Win32 Error 10061>.'	
Check if the Quest InTrust Agent service is running and not stopped on the InTrust server. If the service is stopped, start it and try registering the agent again.	
Also note that this error is possible if port 900 is closed by a firewall between the agent and the server.	
Installation of an agent on a computer under an account from a trusted domain may fail with an error message stating that the 'Logon as a service' right cannot be granted to the agent account. This happens if the specific account has never logged on to that computer before. To prevent the problem, log on to the target computer under that account before installing the agent.	0114825
When you are installing an InTrust agent by running the agent installation package (adc_agent*.msi), a Command Prompt window pops up. This window neither requires any input nor indicates of any problem with the agent installation.	0135636
If you install an agent on a computer using the .MSI package, then manually uninstall it with the adcscm.nt_intel.exe -uninstall command and try to install it later using the .MSI package again, the agent setup prompts you to repair or remove the agent as if it was still installed. Select the option to Remove the agent, let the setup run to the end, and then run it again to have the agent installed.	0135745
InTrust agents do not support the ja_JP.SJIS locale on Linux.	0148319
If you use InTrust Manager to unregister an InTrust agent residing on a computer that has no connection to the InTrust Server, then you may get errors trying to register the agent again with InTrust Manager after the connection is restored. If this happens, use the agent command with the -add parameter on the target computer.	0149798
If agent recovery takes place on a site for which the Prohibit automatic agent deployment on site computers option is enabled, the InTrust Server log may contain incorrect messages stating that the recovery was successful.	0114462
When you are uninstalling an InTrust agent by running the agent installation package (adc_agent*.msi), the File In Use dialog may pop up stating that the Quest InTrust Agent process currently uses the files that require update, and prompting you to either Exit or Ignore or Retry. Agent uninstallation is expected to finish successfully if you select the Ignore option.	54666

Known Issue	Issue ID
When you select a shortcut menu command to uninstall an agent running on a machine in a different AD forest than that the InTrust Server machine belongs to, the agent service may be not uninstalled from its local machine even if you enter proper account credentials when prompted and the agent is no longer listed as installed and running in InTrust Manager. You may have to check the presence of the Quest InTrust Agent, Quest InTrust Agent Installer and Quest InTrust User Session Monitoring services on the machine you attempted to uninstall the agent from, and remove the services manually.	83400
You may experience delays with successful agent installation for a collection or site that includes a large number of computers that are unavailable at the time of this operation.	83399

Table 13: Networking known issues

Known Issue	Issue ID
InTrust does not support NetBIOS computer aliases.	

Table 14: Real-time event log gathering known issues

Known Issue	Issue ID
If a repository becomes unavailable during real-time collection, the InTrust server that manages this repository may put duplicate events in the other repositories that it manages. This happens because the server re-submits everything that was in the event queue at the moment the repository became unavailable.	IN-2456
When you create a collection in InTrust Deployment Manager, only events logged after the start of real-time gathering will be collected to the target repository of that collection. If you need events logged before that moment to be collected into the same repository, consider using InTrust Manager to collect those events into another repository and run a consolidation job to move those events to the repository you need this data in.	83446
In InTrust Deployment Manager, you may see some computers listed with the "Not installed" status that never changes. If you see this, check if your DNS server has multiple computer name entries for IP addresses matching those of computers with the sticky "Not installed" status, and clean up stale DNS records.	82991
If you delete a data source associated with any collection, the number of computers in every collection will be displayed as "0" until InTrust services are restarted on the InTrust Server machine. Computer counters in InTrust Deployment Manager is the only implication of the effect, no other aspect of InTrust operation is affected.	83414
If, in a multi-server InTrust organization, you uninstall an agent with no error, but its status is still displayed as "Installed" and further attempts to uninstall it keep failing with the "Cannot uninstall agent" problem, this agent must be a part of collection that is assigned to another InTrust Server (not the server that installed the agent on its computer).	83485
If you change the communication port number from its default value during the InTrust installation, InTrust Deployment Manager cannot automatically connect to the local InTrust Server. Use the Connect to menu command to manually select the local server as the one to work with.	83413
If you work with InTrust Deployment Manager connected to one InTrust Server in a multi-server InTrust organization and another InTrust Server goes down, collections handled by the failed server will continue looking 'green' to you.	83508

Known Issue	Issue ID
<p>Using the same repository for real-time event collection and task-based workflow is discouraged.</p> <p>One of the possible consequences of using it for both methods is that after you start real-time collection from a computer for the first time, no data from that computer will be available to InTrust import and consolidation jobs for the first 24 hours, even though the data will be available in Repository Viewer.</p> <p>There are other implications as well. Specialize your repositories by type of auditing method.</p>	84430
<p>If you have multiple collections performing real-time event gathering of the same log from the same computer, then you will have duplicate events in the repository and in reports created by Repository Viewer.</p>	85448
<p>If a real-time collection is populated by LDAP query, the resulting set of computers can be different from the set returned by Windows native tools. This is because InTrust and Windows use different attributes for identifying computers by name.</p>	682176

Table 15: Task-based gathering known issues

Known Issue	Issue ID
<p>In the properties of the "VMware ESX and ESXi events" and "VMware vCenter events" data sources, the Clear log after gathering option has no effect.</p>	IN-10946
<p>Suppose you have a gathering job that collects custom text logs to either a repository or an audit database, but not both at once. If you change the job settings so that it collects both to a repository and to an audit database, then you may experience the following issues during the next gathering session after this change:</p> <ul style="list-style-type: none"> You may get duplicate events, or some events may be lost, even though you will not get any error or warning messages. The gathering can be slow and take hours or even days if there are a lot of matching files to collect from. <p>These problems don't occur if the specified repository and audit database are new and haven't been used.</p>	IN-9820, IN-9632
<p>When you gather IIS logs, you may get the following error message in the Sessions view:</p> <p>The specified log doesn't exist.</p> <p>In cases where the necessary logs clearly exist, this misleading message is shown if the IIS 6 Metabase Compatibility role service is not installed on the IIS server. Install the service to fix the problem.</p>	IN-6616
<p>When you monitor IIS servers, you may get an error like the following in the InTrust Server log:</p> <p>Cannot install package IISRT.</p> <p>This cryptic error may mean that the IIS 6 Metabase Compatibility role service is not installed on the IIS server. Install the service to fix the problem.</p>	IN-6978

Known Issue	Issue ID
<p>If changing IndexManager Server or path to an index of the indexed repository, gathering into this repository may fail with an error like:</p> <p>Failed to insert event to repository. ADC Error: The repository at "\\?\C:\Repository\" has multiple indexes, which is an unsupported configuration. The extra indexes could not be cleared automatically.</p>	83596
<p>Events logged for renaming an account in Active Directory collected with a gathering policy based on a data source with the Create agent-side audit log backup option enabled may be stored to the target repository or/and database with the old account name specified instead of its new name. This happens because, due to the current implementation of operations with AD accounts and event logging in Microsoft Windows, this data is not yet available at the moment when the event is written to the agent-side cache.</p>	57888
<p>If at the moment you attempt to gather Microsoft Proxy Server log this log contains event data in different formats, then gathering process will not work correctly.</p>	0117156
<p>If you gather IIS/ISA Server text logs with the Time data field disabled for logging, some events may be lost. To avoid event losses, don't disable the Time field in the logging options on IIS/ISA Servers you are going to collect logs from.</p>	0117109
<p>Some successful InTrust activities, such as event forwarding and running jobs, can cause error messages if the system time is not synchronized between the InTrust Server and the SQL Server that hosts the InTrust configuration database.</p> <p>This is the case in the following situations:</p> <ul style="list-style-type: none"> • Task sessions in InTrust Manager show an error message like this: "The session terminated unexpectedly", while the job sessions in the tasks are marked as successful • An irrelevant collection-wide error message about repository file processing is shown InTrust Deployment Manager; this is really related to event forwarding 	0152716, IN-4853
<p>You should keep the system time synchronized between the two servers.</p>	
<p>Time stamp for events collected with a Data Source of the Custom Text Log type may be displayed incorrectly in InTrust Repository Viewer if these events were logged before the system time adjustment for daylight savings but collected after the time switch. In the Audit database, event time is saved correctly and this problem does not affect in InTrust reports.</p>	0154507
<p>When events from the IIS log are collected with the Ignore events older than / before option enabled, a warning about some events having been ignored is not logged to the results of the gathering job session as it is for gathering jobs that collect events from other logs with this option enabled.</p>	0155889
<p>If an InTrust Server is included in a site with automatic agent deployment disabled, a message about skipped agent installation is generated for the InTrust Server computer, and no gathering or monitoring policies that apply to the site are applied to it. As a workaround, consider including the InTrust Server computer into a site with automatic agent deployment enabled and running some gathering job for that site at least once. Then you may move it back to the original InTrust site since the policies will work for it as expected.</p>	0114233
<p>Events on a Group Policy creation collected with a gathering policy based on a data source with the Create agent-side audit log backup option enabled may be stored to the target repository or/and database with the GPO display names unresolved. This happens because, due to the current implementation of GPO creation and event logging in Microsoft Windows,</p>	27221

Known Issue	Issue ID
this data is not yet available at the moment when the event is written to the agent-side cache.	
On domain controllers that are really busy with processing Active Directory requests, Events on operations with newly created accounts collected with a gathering policy based on a data source with the Create agent-side audit log backup option enabled may be stored to the target repository or/and database with SIDs not resolved to account names. This happens because, due to the current implementation of account creation and event logging in Microsoft Windows, this data is not yet available at the moment when the event on account creation is written to the agent-side cache. Account resolution for events following an account creation event is done based on the account data stored in the agent SID cache, causing account SIDs being collected for these events instead of account names until the account is cleared from the cache.	71273
When you change the location of an event log file on a computer running Windows Server 2016 or later, InTrust may be unable to collect events from that log even after you reboot the server and it starts writing new events into the log at its new location. Like Windows native Event Viewer running on a remote pre-Windows 2016 machine, InTrust will be unable to use the log after you move it until you reboot the collected server again.	54042
InTrust cannot resolve event descriptions for events collected from Windows Server 2016 or later if the EventMessageFile or CategoryMessageFile value is not defined in the registry for the corresponding event Source on the collected computer.	65584, 65585
InTrust does not automatically process Application and Services event logs auto-archived by the operating system.	81852
If a warning occurs during gathering, InTrust loses information about the number of gathered events and doesn't show the number in the session summary.	695430

Table 16: Real-time monitoring known issues

Known Issue	Issue ID
Alert suppression has the expected effect, but doesn't affect the logging of rule matches. Rule match events are always written to the InTrust Server log, whether alerts were raised or suppressed.	IN-7907
If you run Event Viewer and view the InTrust Server log before there are any events with event ID 17408 in the log, and such events arrive later, then the Task Category field will show "(1)" for the events. The value of Task Category should be "Rule match".	IN-11517
It may take the InTrust Real-Time Monitoring Server service a long time to stop if the Alert Database is overloaded with alerts and slow to respond.	0111672, 0115603
Do not use wildcards in rule parameter values that define authorized/administrative/target/etc. groups in rules that require group membership resolution for user accounts. Most of these are rules with words 'by unauthorized personnel', 'administrative account', 'administrative rights' in their names.	0112159, 0112161
Community names with non-Latin characters are sent incorrectly when you select sending an SNMP trap as a response action for a real-time monitoring rule.	0115387
After the Quest InTrust Real-Time Monitoring Server service is restarted, real-time monitoring may temporarily stop working for a computer that is included in multiple InTrust sites under different names if those InTrust sites are configured for real-time monitoring with the same monitoring policy. Monitoring will be resumed for each affected InTrust site when it is	0115566

Known Issue	Issue ID
enumerated the next time, as defined in the site properties.	
The RemoveGroup script does not remove Distribution groups from Active Directory.	0115585
When a new Alerting Profile associated to a different InTrust Server is created in any installation of Monitoring Console in the InTrust Organization, clickable links in alert notification emails stop working for any alerts in the old Alerting Profiles.	0152503
If you experience a degrade in the Alert Database performance, try increasing values of the two InTrust configuration parameters that control the buffer and queue sizes for the connection InTrust makes to the Alert Database. Running the following SQL query on the InTrust configuration database will increase both sizes from the default value of 800KB (819200 bytes) to 10MB (10485760 bytes):	0153944
<pre>UPDATE ADCOrganizationParameter SET [Value] = '10485760' WHERE (Name = 'ITRT_CommMaxSizePerConnection') OR (Name = 'ITRT_CommQueueSize')</pre>	
After disabling a real-time monitoring policy configured to monitor an MS IIS Server and removing the InTrust Agent from a monitored IIS computer you will have to restart IIS on that computer in order to restore its Web connectivity.	0149865
If a script-based real-time monitoring rule fails on some of the monitored computers, the agent installed on that computer does not inform InTrust Server about the failure and no error entry is reported in the InTrust Server log.	0151859
When real-time monitoring rules are matched, event field names that consist only of digits are treated as integers. This causes errors, because string values are expected.	0135658
When two or more InTrust Servers have real-time monitoring policies with WMI-based rules in them applied to the same computer, alerts triggered by rules handled by different InTrust Servers may be saved to an Alerts database of a wrong InTrust Server.	0184711
You must be a member of the Administrators group on the InTrust Monitoring Console machine to make changes to Database settings of an alerting profile if this profile has SQL Authentication selected for its connection to the Alert database.	41049
You may receive the following error at an attempt to import an exported user settings in InTrust Monitoring Console:	41636
<pre>Cannot import user.</pre> <pre>Enhanced error information.</pre> <pre>Number: 0x80004005</pre> <pre>Description: 007~ASP 0104~Operation not Allowed~</pre> <p>This is most likely to be caused by the settings of MS IIS hosting InTrust Monitoring Console. A solution that works for this issue is proposed in the Microsoft article HTTP Error 404.13 - CONTENT_LENGTH_TOO_LARGE when you visit a web site that is hosted on a server that is running IIS 7.0.</p>	
An attempt to export a large number (around 10,000 or more) of alerts from InTrust Monitoring Console to a Microsoft Excel spreadsheet may fail with the following error:	41622
Cannot show alerts.	

Known Issue	Issue ID
<p>Enhanced error information.</p> <p>Number: 0x80004005</p> <p>Description: &nbsp;006~ASP 0251~Response Buffer Limit Exceeded~Execution of the ASP page caused the Response Buffer to exceed its configured limit.</p> <p>This is most likely to be caused by the problem with Microsoft IIS described in Microsoft KB article 944886 "Error message when you use the Response.BinaryWrite method in IIS 6 and in IIS 7".</p>	

Table 17: Repository Viewer known issues

Known Issue	Issue ID
A Repository Viewer search that is locked for editing can still be modified in some non-straightforward ways.	IN-14325
If you create a search and it becomes selected as a forwarding filter during the same Repository Viewer session, that search does not become locked for editing in that same session. The next time you open Repository Viewer, the search is locked as it should be.	IN-14361
If a search is used as an event forwarding filter, the tooltip for that search lists the repositories that use it for filtering. The tooltip is all one line, and it may not fit on the screen if the list is long.	IN-14380
In PDF reports created by Repository Viewer, international characters (for example, Japanese, Chinese or Korean) are rendered incorrectly if the Arial Unicode MS font is not installed on the report-making InTrust server. As a workaround, set a valid international font for reports, as described in Quest Support knowledge base article 318235 .	85225, IN-8504
When Repository Viewer shows the details for a parsed Syslog event that has named insertion strings whose names start with an underscore (for example, _Address), such strings are always hidden. You can see the values of such fields only in the description, which contains the entire original message.	IN-4535
<p>Repository Viewer opens a repository under the same account that you are using to run it, no matter what access credentials are specified in the properties of that repository.</p> <p>One workaround is to use the runas command to explicitly make Repository Viewer use the account that is allowed access to the repository. For example, if mycorp\intrust_admin is such a user account, then start Repository Viewer as follows:</p> <pre>runas /netonly /user:mycorp\intrust_admin new_RV.exe</pre> <p>As a result, Repository Viewer runs under your current account, but uses the mycorp\intrust_admin account for network operations.</p>	—
Repository Viewer doesn't start on a computer where the original .NET 4.0 is installed but updates for it are not.	610576
The Delete and Backspace keys don't work as expected in filter boxes using the "Last"	595938

Known Issue	Issue ID
keyword.	
Custom values cannot be specified in the Environment and Type data fields. Custom-made events written through the InTrust API may have any value in this field, but they cannot be matched by those fields in Repository Viewer.	595593
Under certain circumstances, you may be receiving recurring "Out of memory" errors at attempts to run an event search. To stop receiving these errors, restart Repository Viewer.	82048
Search filters for the StartTime and EndTime data fields in user session events cannot be set for search folders where these columns are displayed in the grid. Those two are data fields of the Text type and not DateTime. You can search by those fields, entering search criteria as text, but not filter by a time interval.	82391
If you search for events where a specific insertion string or resolved insertion string has a particular value or is blank, then the results can include events where there is no such string at all.	595932, 597587
Searches by the "Whom" field are slow.	597242
Searches by "Any field" are slow.	597613
Searches by some resolved insertion strings don't work.	598012
It is not recommended that you increase the limit on the number of items displayed in the event grid. The higher the limit, the more memory Repository Viewer will consume. Changing the limit carelessly may cause your computer to run out of memory.	593857

Table 18: SSRS reporting known issues

Known Issue	Issue ID
Don't use the Update Database option for any data source in Knowledge Portal since it proved to run an outdated SQL script on Audit databases. This command is intended to update a structure of an Audit database created by InTrust of version earlier than 9.0. If you use Audit database(s) created with later versions of InTrust, you don't need to update the Audit database structure.	0190753
Don't add too many reports to one reporting job. Doing so may make the whole Tasks node not responding to your attempts to browse it, with the following error message displayed: Enumerating collection failed. Reason: Not enough storage is available to complete this operation. If you are absolutely sure you need hundreds of reports to be processed with one reporting job, consider installing additional memory on the SQL Server computer that hosts InTrust configuration database.	0181130
If you modify a model of a report that is already included in some reporting jobs, for example, add or remove a filter, reporting job(s) configured to compile this report will fail with the following error: Object reference not set to an instance of an object.	0180458

Known Issue	Issue ID
<p>After you modify a report model, you will have to remove it from any reporting jobs that use it and add them to those jobs again.</p>	
<p>A report with query based parameters or filters cannot be added to a reporting job if a data source specified for this report is configured with invalid settings. An attempt to add such a report to a job fails with the following error:</p> <p>Cannot create a connection to data source 'MainDataSource'.</p> <p>If you receive this error, edit the properties of the related data source to make sure it lets the report access a valid InTrust Audit database.</p>	0183629
<p>An event logged to the InTrust log for a completion of a reporting job that failed states the job has completed successfully. Under the Sessions node, the status of the job is displayed correctly.</p>	0184386
<p>The unclear error message:</p> <p>Report "<report_name>" failed to process: An error has occurred during report processing. An error has occurred during report processing. An error has occurred during report processing. Query execution failed for data set 'MainDataSet'.</p> <p>is logged to the session results for each report in a reporting job that is configured to use a Data Storage that is not accessible when the job starts.</p>	0184587
<p>If InTrust reporting is configured to access MS SQL Reporting Services over an HTTPS connection, and the InTrust Server computer does not have a certificate installed for the specified MS SRS server, an attempt to access Reporting Services results in the following error:</p> <p>Error 0x00004659: Internal error occurred. Reason: 0x80131509: The underlying connection was closed: Could not establish trust relationship with remote server.</p> <p>To install a required certificate, you can use Internet Explorer to open the URL of MS SRS specified in the properties of the Reports node in InTrust Manager as 'MS SQL Reporting Services path'. When prompted for certificate installation, accept it. When the certificate is installed, you will be able to perform any operations with reports and reporting jobs in InTrust Manager.</p>	0185153
<p>If a reporting job fails to notify an operator specified on the Notification tab, it neither sends generated report(s) by e-mail to recipients specified on the Delivery tab even if all the settings on that tab are correct and the e-mail can be sent.</p>	0186899
<p>A reporting job may fail with the following error:</p> <p>The job was finished, but no entry was created for it in the task session because of an error.</p> <p>If this happens, check whether the account under which the job starts has the Read access permission to the Windows folder on the InTrust Server computer.</p>	0187676
<p>If a reporting job fails with the following error:</p>	0188342

Known Issue	Issue ID
<p>The remote server returned an error: (500) Internal Server Error.</p> <p>check the reports in the job for incorrect filter settings. This error may be logged to the session results, for example, when some report has a filter that requires a non-empty value specified, and that filter is disabled.</p>	
<p>When you manually stop a reporting job that is running, temporary objects related to reports the job has generated before termination may be not always automatically removed from MS SQL Reporting Services server and you may have to clean them up later.</p>	0186374
<p>Some subreports are cached. If you configure filters in the parent report, the subreport is not regenerated with these filters. Instead, the subreport's version is loaded from the cache. To compile a subreport with filters, press Ctrl+F5 to refresh the subreport page.</p>	0145121
<p>For very large reports, the Print Preview page may not open and the report may not print.</p>	0139691
<p>Page breaks in the online version of a report may not correspond to the page breaks in the printed version.</p>	0139480
<p>If the Microsoft SQL Server Reporting Services and Microsoft SQL Server used to generate a report are installed on different computers, then the report cannot be compiled using the Windows Authentication of the user currently logged on to Knowledge Portal.</p>	0145326
<p>Search results for the search through report descriptions may not include all keywords actually existing if description is longer than 512 characters.</p>	0168949
<p>If browsing for SRS local user/group accounts when configuring report (folder) security settings, in case of remote installation (Knowledge Portal installed on different computer from SRS), similar account found on Knowledge Portal computer will be selected.</p>	0181349
<p>If password was changed for the user account you planned to use for browsing Active Directory (specified during the setup), then error will occur when you try to browse for this account when assigning security roles in Knowledge Portal.</p>	0173578
<p>If you select the Create the Reporting Server snap-shot option on the Delivery tab of a reporting task properties, the settings of InTrust Data Sources used by reports in the job are overwritten with the values specific to this job.</p>	0191127
<p>InTrust does not clean up all of the temporary tables and views reports create in the databases. Depending on the version of SQL Server hosting the database you need to clean up, use the TempCleaner_2000.sql or TempCleaner_2005.sql script from the product distribution (in InTrust\Tools\Database CleanUp) to remove the temporary objects from databases. The script can be scheduled by means of MS SQL Server to be run on a regular basis and configured to delete temporary database objects older than a specified number of days.</p>	0191293
<p>You may receive the following confusing error:</p> <pre data-bbox="199 1512 933 1538">"Query execution failed for data set 'MainDataSet'."</pre> <p>during an attempt to open a subreport of a report generated by a reporting job. If this happens, check if the subreport uses a different data source than the main report included into the job, and if that data source is configured with valid settings (server, database, access credentials).</p>	0191339
<p>You may be unable to compile subreports of the Multiple failed account logons report if a reporting job configured to compile it accesses the SQL Server under an account that does not have the db_owner role for the InTrust Audit database.</p>	0188067

Known Issue	Issue ID
If you select the Use SRS data source associated with each report option for a reporting job, make sure no report included into the job has an associated data source with the Credentials supplied by the user running the report option selected in its properties.	31276
When you configure a reporting job with the Import objects from the following repository option enabled, and set it up to include reports configured to use event local time, as opposed to GMT, make sure to provide time values matching local time on the event originating computers in time-related filters of the reports.	36881
When you configure filters in a report and enable the NULL checkbox for either the Date/time from or Date/time to filter, values you specify in these filters will be ignored and data in the report will be filtered based on the value specified in the Interval filter.	41084
When a report with a cover page enabled is exported to a file in the Excel format, the resulting Microsoft Excel document does not include data column captions.	40615
The su command usage report may produce incorrect output if it is generated on the audit trail that includes entries in languages other than English.	26561
A reporting job configured to import required data from a repository may sometimes fail with the following error logged to the session results (RDDI Import node): Description: Cannot initialize the required component. Cannot create one of the InTrust components.Cannot open repository. The system cannot find the path specified. or Description: Cannot import data from the repository.Cannot enumerate the repository objects. If this happens, check if there is a database or some other object under Data Stores node in the configuration with a name identical to that of the source repository for the job. Rename one of the objects to make names of all objects under the Data Stores node unique.	42803
You cannot specify a name of a text file listing parameter values in the input field on a report parameter tab in the reporting job configured to import required data from a repository. If you do so, the reporting job will fail with the error message looking like: Internal error: Cannot initialize required component.ADC Error0x8add2102: Failed to initialize DataFilters.	54632
If a reporting job configured to import required data from a repository fails with the following error: Preparing for data import has finished with errors. check that a semicolon (";") is the last character of a connection string specified in the data source of every report included into the job.	54667
Report driven data import (RDDI) does not work for reports from the Quest InTrust Report Pack for VMWare vCenter and ESX/ESXi. You need to collect or import events for these reports into an audit database with a gathering or import job before you generate a report output.	73519
When you configure a report to use filter values from a file, on a 64-bit Microsoft SQL Server 2008 the report will fail with an error message stating:	80378

Known Issue**Issue ID**

OLE DB provider 'Microsoft.Jet.OLEDB.4.0' cannot be used for distributed queries because the provider is configured to run in single-threaded apartment mode.

Follow these steps to work around this problem:

1. Download the report from your Microsoft SQL Reporting Services Server as an .RDL file, edit this file to replace the 'Microsoft.Jet.OLEDB.4.0' text with 'Microsoft.ACE.OLEDB.12.0' and upload the updated file back to the SSRS.

2. Execute the following batch on your 64-bit Microsoft SQL Server:

```
USE [master]
GO EXEC master.dbo.sp_MSset_oledb_prop
N'Microsoft.ACE.OLEDB.12.0', N'AllowInProcess', 1
GO
EXEC master.dbo.sp_MSset_oledb_prop N'Microsoft.ACE.OLEDB.12.0',
N'DynamicParameters', 1
```

Table 19: Agent-side audit log backup known issues

Known Issue	Issue ID
The option to resolve IP addresses at gathering IIS logs does not work with the 'Create agent-side audit log backup' option enabled.	0154160
When you process a non-Windows audit trail, avoid gathering the same event data to the same Audit database with and then without the 'Agent-side audit log backup' option enabled on the agents, since this may result in duplicate event records in the Audit database. For event data collect from Windows event logs, duplicate records never appear in an Audit Database.	0154165
Events collected from IIS Server log with the 'Agent-side audit log backup' option enabled are stored with empty site description fields.	0154362
An attempt to change location of an audit log backup on the agent engaged in real-time monitoring of a Microsoft IIS WWW log or gathering of that log with the 'Create agent-side audit log backup' option enabled fails with the following error popping up in InTrust Manager: Error 0x00004659: Internal error occurred. Reason: 0x00004659: <ComputerName>: The process cannot access the file because it is being used by another process.	40556

Table 20: Switching Wizard known issues

Known Issue	Issue ID
All agents in an InTrust Site lose the Limit CPU usage to setting when the site is moved to another InTrust Server with Switching Wizard.	0141795
Don't use the AdcFailover.exe from the Support Tools folder on the InTrust Server to start the InTrust Server failover process. In the current version of InTrust, use the Switching Wizard that can be run from InTrust Manager, or the Switch server response action that runs when the InTrust server is down predefined rule is matched.	0115054
If an InTrust site with Unix computer has been re-assigned for processing to a different InTrust	0139189

Known Issue	Issue ID
Server during a failover procedure, you must manually register every Unix agent in the site on the new InTrust Server.	

Table 21: Repository management known issues

Known Issue	Issue ID
If you convert the same .EVT file to the same repository using Evt2Repository.exe tool more than once, data from that .EVT file will be duplicated.	0117160
When a repository cleanup job starts under an account that has insufficient rights for deleting data from the target repository, the job fails with an error message that does not mention the reason for the failure: Cannot clean up obsolete data from one or more data stores. Cannot remove one or more files.	0155534
When you create a new repository of the EMC Centera type and select the 'Use custom connection string:' option, make sure to not save a new line character at the end of the connection string you type in there. A connection string with trailing line feed characters will look as a valid one but will cause InTrust fail to authenticate when it connects to EMC Centera.	
Be careful to not specify a path to a file system based EMC Centera repository index when you configure a file system based repository, or to specify a path to a file system based repository when you configure a repository on EMC Centera. Either mistake may result in corrupted or lost data in a repository.	
Repository Viewer does not correctly display insertion strings longer than 260 characters in events stored in a repository. Characters starting from position 261 are not displayed.	
The Use this InTrust server to manage the repository setting in the properties of a consolidation job cannot be used with InTrust repositories based on EMC Centera.	54022
You may receive the following misleading error message in Repository Viewer when you open an indexed repository through an InTrust Server: Could not open repository. Error details: Repository is not ready for index-based search. Select a different repository. In InTrust Manager, go to /Configuration/Data Stores/Repositories , open the Properties dialog for the affected repository and verify that the path to it is specified in the InTrust configuration as a UNC and not as a local path that is valid for only one InTrust Server machine in the organization.	67171
If you specify a special account for repository indexing in the Properties of a repository and plan to run IndexingTool.exe locally on the repository machine, provide that the account has the Log on as a batch job user right on that machine.	67189
Indexing a repository located on a local disk of an InTrust Server computer that manages indexing of this repository may fail with the following error message in the InTrust Server log (Event ID 14128 in the InTrust event log): Indexing of repository "<repository_name>" failed. Details: Indexing on agent localhost failed, reason 'ADC Error: ADC Error0x80004005: Cannot create temp directory Unspecified error (Win32 error: 0x80004005), error	67203

Known Issue**Issue ID**

code 0x80004005 '.

This happens if a specific account is specified in the properties of an InTrust Server local repository to be used for access to it, and this account does not have sufficient access rights to the %TEMP% folder of the Quest InTrust Server service account. Consider either changing the account used to access the repository or giving it rights to write to and read from that folder.

Repository Viewer does not notify a user if a connection to the open repository or its index is broken, for example, because of a networking issue or change in security settings. If you find that the number of events displayed in Repository Viewer becomes unexpectedly small, try reopening the repository. If this operation fails, act upon the error message you receive. If you receive no error but reopened Repository Viewer shows no events for any node in the repository except the root node, this means that the connection is lost with index only. 67298

You may get the following non-informative error message in the InTrust Server log: 67252

```
Indexing of repository "<repository_name>" failed. Details: Indexing on agent <agent_name> failed, reason 'ADC Error 0x80070643'.
```

It usually means that an agent has failed to install **IndexingTool.exe** on its local machine (for example, because system requirements were not met or user privileges were insufficient).

When you run Repository Viewer using an account with no administrative rights on the local machine, and specify a wrong path to the repository you want to open, a message box that pops up to notify you of this error may display no text. 67270

An attempt of an agent to install IndexingTool.exe on its local machine may cause a system restart if the machine has Repository Viewer installed. 67297

If you open a repository in Repository Viewer installed on an InTrust Server computer where the port number for InTrust Manager connection has been changed from the default value (8340), and you select the option to open a Production repository on Local computer, you will receive the following error message: 67303

```
The RPC server is unavailable. (Exception from HRESULT: 0x800706BA)
```

To avoid this, change your choice on the **Select InTrust Server** wizard step from Local computer to This InTrust server, and select the name of the local computer from the list.

You may receive confusing error messages when you try to open a repository as an indexed one, but the indexing of this repository has not started yet. 67309

If you see repository indexing on an agent failing with the following non-informative error: 68167

```
ADC Error: , error code 0x8adc1006
```

check if the agent account specified in the Properties of the InTrust site differs from the account specified in the Properties of the repository for indexing. If the accounts are different, it is likely that the repository indexing account does not have access to the Local Settings subfolder in the profile of the agent account on the agent machine. Consider changing this setup to have an agent service account specified either in the site Properties OR in the repository indexing settings, or giving the indexing account Read and Modify access permissions to the profile of the agent account.

Known Issue	Issue ID
<p>You may see repository indexing on an agent failing with the following error:</p> <pre>A required privilege is not held by the client</pre> <p>This is likely to mean that you have one and the same account explicitly specified as the agent account in the Properties of the InTrust site and the account specified for indexing in the Properties of the repository. If this is the case, verify that the account has the following user rights on the agent machine:</p> <ul style="list-style-type: none"> • Replace a process level token • Log on as service • Log on as batch job • Adjust memory quotas for a process 	68121
<p>If you open a repository that has not been indexed yet, then close Repository Viewer and open it again when indexing of this repository is done, the status of the repository in Repository Viewer will be still displayed as 'Not indexed'. This happens because Repository Viewer does not refresh repository indexing statuses at its startup, and has no negative effect on viewing repositories and searching events.</p>	70451
<p>Repository indexing on a remote machine may fail to start with the following error message registered in the Application event log:</p> <pre>Event ID: 14128 Type: Error Source: Indexing Launcher Operation: Indexing Computer: Description: Indexing of repository "Default InTrust Audit Repository" failed. Details: Indexing on agent localhost failed, reason 'ADC Error0x80070643'.</pre> <p>This is likely to happen if the %TEMP% folder for the local system on the agent machine is missing. The automatic installation of Quest InTrust Indexing Tool (IndexingTool.msi) is being run under the local system account and fails with this error if it cannot access the temporary folder (normally %SYSTEMROOT%\Temp). Make sure the folder exists and the installation process can access it.</p>	73272
<p>If you see the following error message in the Application event log:</p> <pre>Event ID: 14128 Type: Error Source: Indexing Launcher Operation: Indexing Computer:</pre>	68653

Known Issue	Issue ID
<p>Description: Indexing of repository "Default InTrust Audit Repository" failed on agent <computername>. Reason: 'ADC error: ADC Error0x80070006: The handle is invalid. The handle is invalid. (Win32 error: 6), error code 0x80070006..</p> <p>this may be a result of the computer hosting the repository being too busy and slow to respond at the time of indexing. Try reducing the load on the repository machine or re-indexing the repository later.</p>	
<p>If you find that the Quest InTrust Server service process (adcrpcs.exe) terminates unexpectedly, this may be a result of repository indexing on the local computer running out of disk space. Resolve the disk space problem and restart the Quest InTrust Server service.</p>	61874
<p>Repository Viewer may fail to display events from a repository with the following error message that may be confusing:</p> <p>The process cannot access the file because it is being use by another process.</p> <p>This error is likely to mean one of the following:</p> <ul style="list-style-type: none"> • The idle repository you are trying to view is opened with another instance of Repository Viewer. • You try to view an idle repository that is currently being indexed. • You select the Open Idle Repository option in Repository Viewer to open a repository that should be accessed through an InTrust Server. 	62851
<p>If you create a new repository object with a non-default path that is also used by another repository, you will get duplicate indexes, gathering will stop working and the InTrust log will contain errors like the following:</p> <p>Operation failed on agent localhost. Reason: 'ADC Error: The repository at "DEAUDI00 InTrust Audit Repository" has multiple indexes, which is an unsupported configuration. The extra indexes could not be cleared automatically. Please delete irrelevant indexes to make sure the repository has only one index. For details, see the Working with Repositories document from the InTrust documentation set., error code 0x8adc1005'</p>	592988

Table 22: Syslog processing known issues

Known Issue	Issue ID
<p>When syslog events are collected from a computer to which syslog is redirected and not from original host that generate them, event time values in local time will be calculated based on the time zone of the computer InTrust collects them from. If you choose to treat timestamps in syslog events as local time, consider redirecting syslog for gathering it with InTrust to a computer in the same time zone as the hosts you redirect it from.</p>	0146199
<p>InTrust agent makes a backup copy of syslog*.conf files when it starts, and restores the files from that backup when it shuts down. Changes you make to syslog*.conf while InTrust agent is running are lost when you shut down the agent process. Consider keeping track of the changes you make since you may need to reapply them after shutting down the agent.</p>	60463

Table 23: Microsoft IIS log processing known issues

Known Issue	Issue ID
Microsoft IIS FTP log monitoring in cached mode does not work with IIS 6.0.	0145807
InTrust cannot resolve the %event_1.cs_cooke% parameter in alerts and notifications generated by real-time monitoring of the Microsoft IIS WWW log.	25411
During real-time monitoring or gathering of IIS 7.0 WWW logs with the agent-side audit log backup enabled, the values of some data fields (time_taken, cs_bytes, sc_bytes) in generated alerts or collected events are set to 0.	51758
Gathering of WWW logs in UTF-8 format does not work if logging on the IIS is configured with the Do not create new log files option enabled (a size of a single log file is not limited).	53804
Real-time monitoring and gathering of IIS 7.0 FTP logs with the agent-side audit log backup enabled doesn't work.	52601

Table 24: Microsoft ISAS log processing known issues

Known Issue	Issue ID
<p>The following reports in the current version of InTrust do not return events collected from MS ISAS 2004:</p> <ul style="list-style-type: none"> • ISA Firewall: Cannot Assign Requested Address • ISA Firewall: Connection Refused • ISA Firewall: Connection Timed Out • ISA Firewall: Host not Found • ISA Firewall: Network is Unreachable • ISA Firewall: Total Statistics • ISA Firewall: User Connection Statistics by Agent/Platform • ISA Firewall: Received Kbytes by Date (chart) • ISA Firewall: Requests by Date (chart) • ISA Firewall: Sent Kbytes by Date (chart) • InTrust for ISAS / MSPProxy / Security / Events Statistics / Raw Data Analysis (form) • InTrust for ISAS / MSPProxy / Security / Events Statistics / Events Statistics • InTrust for ISAS / MSPProxy / Security / Advanced Forensic Analysis / Anomalies Analysis / Anomalies Analysis 	0154104

Table 25: Microsoft ACS data processing known issues

Known Issue	Issue ID
<p>If a gathering job configured to collect event data from ACS keeps failing with the following error logged to its session results:</p> <p>Data Source: Microsoft OpsManager ACS events Description: Errors</p>	55892

Known Issue	Issue ID
-------------	----------

encountered at data collection. ADC Error: Failed to collect from network object. (Internal error: Failed to enumerate event logs. (Cannot enumerate event log instances. (The requested operation timed out.The requested operation timed out.)))

check if the Microsoft SCOM console installed on the InTrust agent (or InTrust Server, in case of agentless gathering) machine is of a version compatible with that of the collected ACS server.

Table 26: Custom text logs processing known issues

Known Issue	Issue ID
When you create a custom text log data source, you can supply a regular expression with a number of groups defined. If you reference a field index that is out of range of those groups, you get the following script error: "val has no properties". Instead of an error, this should be a warning.	IN-9347
Some log files of formats that suppose log data to be rewritten and not always appended to the end of the file, may be collected incorrectly and some events may be lost. If this happens, the 'Invalid record' warning is logged to the gathering session results.	0118101
InTrust agent running on a Unix machine may crash if you specify a wildcard as a part of a name for a directory immediately under the root, like '/tm*', in the path to the collected log. However, for directories down the file system tree in log paths, like '/home/user*', wildcards are safe to use.	0123466
When you collect an audit trail data with a Custom Text Log Events type data source, every event will be collected with values of Version Major and Version Minor data fields set to those of the last collected event.	0165698
The Description data field of events collected with a Custom Text Log Events type data source is not saved to an InTrust audit database.	0184224
In the New Data Source Wizard, on the Date/Time step, clicking on the Test Formatting button will display a correctly parsed date/time fields even if you don't specify field delimiters between field numbers in the 'Log fields' field of the dialog page. However, when you later collect data with the data source created in this way, gathering sessions will fail with error messages stating that some lines in the log cannot be parsed. For example, if the format of date and time data in the log is space delimited, like "Mar 23 12:13:10" and, in the 'Log fields', you specify "<1><2><3>" and not "<1> <2> <3>", the Test Formatting button will recognize date and time correctly but the gathering module will not. Make sure to always accurately specify field delimiters in the 'Log fields' input field on the Date/Time step of New Data Source Wizard.	0183396

Table 27: DB-based logs processing known issues

Known Issue	Issue ID
In the DB-based log provider query, data fields of type(s) TEXT or/and NTEXT must be either come last in the SELECT statement or be explicitly converted to the NVARCHAR data type. Otherwise the following error will be received at gathering: [Microsoft] [ODBC SQL Server Driver]Invalid Descriptor Index.	0119477

Known Issue	Issue ID
If the Oracle DB-based log is being collected from a machine with no Oracle driver installed, Microsoft ODBC Driver for Oracle pops up an error message about the absence of the required Oracle driver on the collected machine. For collections that don't use agents, this message box pops up on the InTrust Server machine, while for agent-enabled collections the error message pops up on the agent side. There is no way for InTrust to suppress this error message box because of the specifics of Microsoft ODBC Driver for Oracle implementation.	0121853
Attempting to select an SQL server from the list in the New Database log template wizard may result in InTrust Manager crashing. This is caused by Microsoft ODBC driver behavior and cannot be controlled from the InTrust Manager snap-in code.	0111355

Table 28: Command line tool known issues

Known Issue	Issue ID
If you run the Evt2Repository.exe tool on a Windows 2008 machine to import events from an event log saved to an .evt file on a pre-Windows 2008 computer, the tool fails with an error message saying the event log file is corrupted. To work around this problem, you can do one of the following: <ol style="list-style-type: none"> 1. Process the file with Evt2Repository.exe on a computer running Windows Server 2003 or earlier. 2. Open the .evt file with Windows 2008 Event Viewer and save it in the .evtx format. Then run Evt2Repository.exe again to import events from the saved .evtx file. 	57215
Don't use the AdcChangePath tool from the InTrust Support Tools folder.	0153635
When the AdcSrvAcc.exe tool is started with the -restart switch on the command line, the Quest InTrust Server, Quest InTrust Real-Time Monitoring Server and Quest InTrust Agent services are not restarted as expected but just stopped and have to be started manually. If the services are not running when the AdcSrvAcc.exe is run with the -restart switch, only the Quest InTrust Server service starts, while the Quest InTrust Real-Time Monitoring Server and Quest InTrust Agent services still have to be started manually. It is recommended that you don't rely on AdcSrvAcc.exe in restarting these three InTrust services but run it without the -restart switch on the command line and use the Services snap-in, net stop/net start commands or some other tool of your choice to have the services restarted.	0153996
Use the Evt2Repository.exe tool to import events only from event log files saved in the .EVT format with Event Viewer. If you try to point it to a raw .EVT file the system is writing events to, or the copy of such a file created outside Event Viewer, Evt2Repository.exe will fail to import events from this file with the following error: <pre>Cannot convert file. The event log file is corrupted. (Win32 error: 1500)</pre>	0155535

Table 29: Platform-specific known issues

Known Issue	Issue ID
If you collect event logs from computers running Windows Vista or later without agents, and InTrust Server is running on a Windows 2003 machine, then the values of some data fields in collected events will not be resolved. Agentless gathering from machines running these operating systems should be done by InTrust Servers running on computers running Windows Server 2016 or later.	53708

System requirements

Before installing InTrust 11.6.0, ensure that your system meets the following minimum hardware and software requirements.

For detailed system requirements for all the InTrust components and processed systems, see the InTrust 11.6.0 System Requirements document supplied in your product distribution.

Product licensing

When you install the product and launch InTrust Deployment Manager or InTrust Manager for the first time, you will be asked to provide a license. Supply the license that you obtained from the sales representative. If you do not supply a license, most of InTrust functionality will be unavailable to you.

To obtain a license, contact your local sales office listed at <https://www.quest.com/contact-sales>.

Upgrade and installation instructions

InTrust 11.6.0 supports upgrade from InTrust 11.5.1, 11.5, 11.4.2, 11.4.1 (with or without Update 1), 11.4, 11.3.2, 11.3.1 and 11.3. To upgrade from earlier versions, you should first upgrade your InTrust installation to one of these versions (as described in the Upgrade Guide for the particular version), and then upgrade from that version to version 11.6.0.

For more detailed instructions on upgrading your existing InTrust installations, see the *InTrust Upgrade Guide* document shipped with this version of the product.

To upgrade a default InTrust deployment, simply close all running InTrust client components and run the Default InTrust Suite on a computer where the earlier version is installed.

More resources

Additional information is available from [online product documentation](#).

Globalization

This release is Unicode-enabled and supports any character set. It supports simultaneous operation with multilingual data. This release is targeted to support operations in the following regions: North America, Western Europe and Latin America, Central and Eastern Europe, Far-East Asia, Japan.

Quest creates software solutions that make the benefits of new technology real in an increasingly complex IT landscape. From database and systems management, to Active Directory and Office 365 management, and cyber security resilience, Quest helps customers solve their next IT challenge now. Around the globe, more than 130,000 companies and 95% of the Fortune 500 count on Quest to deliver proactive management and monitoring for the next enterprise initiative, find the next solution for complex Microsoft challenges and stay ahead of the next threat. Quest Software. Where next meets now. For more information, visit www.quest.com.

Contacting Quest

For sales or other inquiries, visit www.quest.com/contact.

Technical support resources

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at <https://support.quest.com>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product

Third-Party Contributions

This product contains the following third-party components. For third-party license information, go to <http://www.quest.com/legal/license-agreements.aspx>. Source code for components marked with an asterisk (*) is available at <https://opensource.quest.com>.

Component	License and/or Acknowledgement
Apache 2.0	Version 2.0, January 2004 https://www.apache.org/licenses/
7-Zip 18.05*	7-ZIP 9.20 This code cannot be used to create a RAR / WinRAR compatible archiver.
bison 1.28*	GPL (GNU General Public License) 2.0
Boost* 1.61 and 1.33.1	Boost Software License 1.0
CLucene 0.9.21b	Apache version 2.0 Copyright (C) 2003-2006 Ben van Klinken and the CLucene Team This product includes software developed by the Apache Software Foundation (http://www.apache.org .)
Command Line Parser Library 2.3.0	MIT Copyright (c) 2005 - 2015 Giacomo Stelluti Scala & Contributors
cpp-netlib 0.12.0	Boost Software License 1.0
EasyHook 2.7.0.0	MIT Copyright (c) 2009 Christoph Husse & Copyright (c) 2012 Justin Stenning Includes UDIS86 library Copyright (c) 2002-2012, Vivek Thampi
expat 1.95.5	MIT
flex 2.5.4	flex 2.5.25/27
GNU standard C++ class library 3*	GPL (GNU General Public License) 2.0 with the "runtime exception" Copyright (C) 2004 Free Software Foundation, Inc.
Google Open Sans 1.0	Apache 2.0
libiconv 1.1	LGPL (GNU Lesser General Public License) 2.1
Net-SNMP 5.0.3	Net-SNMP
NLog 2.0	BSD Portions copyright 2011 Jaroslaw Kowalski
Open SSL 3.1.2 (Windows)	OpenSSL 3.1.2 FOM (Fips Object Module) – [openssl-fips-3.0.8] Apache 2.0

Component	License and/or Acknowledgement
	Version 2.0, January 2004 https://www.apache.org/licenses/
Open SSL 1.0.2u (Linux)	OpenSSL 1.0.2u FOM (Fips Object Module) – [openssl-fips-2.0.16] Version: 2.0.16 Copyright (c) 1998-2011 The OpenSSL Project. All rights reserved. Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com) All rights reserved. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)
RichText Builder (StringBuilder for RTF)	Code Project Open License (CPOL) 1.02
SpiderMonkey 1.5*	Netscape Public License Version 1.1 ("NPL") 1.1
Sumatra PDF 3.1.2	GNU General Public License (GPL) 3 Copyright (C) Krzysztof Kowalczyk and contributors This component is provided for customers' convenience, but no Quest application uses it.
Wise for Windows Installer 6.20	Wise for Windows Installer 6.20
WTL 8.0	Microsoft Public License (Ms-PL)
ZLib 1.2.13	zlib.h -- interface of the 'zlib' general purpose compression library version 1.2.13, October 13th, 2022 Copyright (C) 1995-2022 Jean-loup Gailly and Mark Adler This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software. Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions: <ol style="list-style-type: none"> 1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required. 2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software. 3. This notice may not be removed or altered from any source distribution. Jean-loup Gailly Mark Adler jloup@gzip.org madler@alumni.caltech.edu

Licenses

Apache 2.0

Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section)

patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

CPOL 1.02

The Code Project Open License (CPOL) 1.02

Preamble

This License governs Your use of the Work. This License is intended to allow developers to use the Source Code and Executable Files provided as part of the Work in any application in any form.

The main points subject to the terms of the License are:

- Source Code and Executable Files can be used in commercial applications;
- Source Code and Executable Files can be redistributed; and
- Source Code can be modified to create derivative works.
- No claim of suitability, guarantee, or any warranty whatsoever is provided. The software is provided "as-is".
- The Article accompanying the Work may not be distributed or republished without the Author's consent

This License is entered between You, the individual or other entity reading or otherwise making use of the Work licensed pursuant to this License and the individual or other entity which offers the Work under the terms of this License ("Author").

License

THE WORK (AS DEFINED BELOW) IS PROVIDED UNDER THE TERMS OF THIS CODE PROJECT OPEN LICENSE ("LICENSE"). THE WORK IS PROTECTED BY COPYRIGHT AND/OR OTHER APPLICABLE LAW. ANY USE OF THE WORK OTHER THAN AS AUTHORIZED UNDER THIS LICENSE OR COPYRIGHT LAW IS PROHIBITED.

BY EXERCISING ANY RIGHTS TO THE WORK PROVIDED HEREIN, YOU ACCEPT AND AGREE TO BE BOUND BY THE TERMS OF THIS LICENSE. THE AUTHOR GRANTS YOU THE RIGHTS CONTAINED HEREIN IN CONSIDERATION OF YOUR ACCEPTANCE OF SUCH TERMS AND CONDITIONS. IF YOU DO NOT AGREE TO ACCEPT AND BE BOUND BY THE TERMS OF THIS LICENSE, YOU CANNOT MAKE ANY USE OF THE WORK.

1. Definitions.

- a. "Articles" means, collectively, all articles written by Author which describes how the Source Code and Executable Files for the Work may be used by a user.
- b. "Author" means the individual or entity that offers the Work under the terms of this License.
- c. "Derivative Work" means a work based upon the Work or upon the Work and other pre-existing works.
- d. "Executable Files" refer to the executables, binary files, configuration and any required data files included in the Work.
- e. "Publisher" means the provider of the website, magazine, CD-ROM, DVD or other medium from or by which the Work is obtained by You.
- f. "Source Code" refers to the collection of source code and configuration files used to create the Executable Files.
- g. "Standard Version" refers to such a Work if it has not been modified, or has been modified in accordance with the consent of the Author, such consent being in the full discretion of the Author.

h. "Work" refers to the collection of files distributed by the Publisher, including the Source Code, Executable Files, binaries, data files, documentation, whitepapers and the Articles.

i. "You" is you, an individual or entity wishing to use the Work and exercise your rights under this License.

2. Fair Use/Fair Use Rights. Nothing in this License is intended to reduce, limit, or restrict any rights arising from fair use, fair dealing, first sale or other limitations on the exclusive rights of the copyright owner under copyright law or other applicable laws.

3. License Grant. Subject to the terms and conditions of this License, the Author hereby grants You a worldwide, royalty-free, non-exclusive, perpetual (for the duration of the applicable copyright) license to exercise the rights in the Work as stated below:

a. You may use the standard version of the Source Code or Executable Files in Your own applications.

b. You may apply bug fixes, portability fixes and other modifications obtained from the Public Domain or from the Author. A Work modified in such a way shall still be considered the standard version and will be subject to this License.

c. You may otherwise modify Your copy of this Work (excluding the Articles) in any way to create a Derivative Work, provided that You insert a prominent notice in each changed file stating how, when and where You changed that file.

d. You may distribute the standard version of the Executable Files and Source Code or Derivative Work in aggregate with other (possibly commercial) programs as part of a larger (possibly commercial) software distribution.

e. The Articles discussing the Work published in any form by the author may not be distributed or republished without the Author's consent. The author retains copyright to any such Articles. You may use the Executable Files and Source Code pursuant to this License but you may not repost or republish or otherwise distribute or make available the Articles, without the prior written consent of the Author.

Any subroutines or modules supplied by You and linked into the Source Code or Executable Files of this Work shall not be considered part of this Work and will not be subject to the terms of this License.

4. Patent License. Subject to the terms and conditions of this License, each Author hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, import, and otherwise transfer the Work.

5. Restrictions. The license granted in Section 3 above is expressly made subject to and limited by the following restrictions:

a. You agree not to remove any of the original copyright, patent, trademark, and attribution notices and associated disclaimers that may appear in the Source Code or Executable Files.

b. You agree not to advertise or in any way imply that this Work is a product of Your own.

c. The name of the Author may not be used to endorse or promote products derived from the Work without the prior written consent of the Author.

d. You agree not to sell, lease, or rent any part of the Work. This does not restrict you from including the Work or any part of the Work inside a larger software distribution that itself is being sold. The Work by itself, though, cannot be sold, leased or rented.

e. You may distribute the Executable Files and Source Code only under the terms of this License, and You must include a copy of, or the Uniform Resource Identifier for, this License with every copy of the Executable Files or Source Code You distribute and ensure that anyone receiving such Executable Files and Source Code agrees that the terms of this License apply to such Executable Files and/or Source Code. You may not offer or impose any terms on the Work that alter or restrict the terms of this License or the recipients' exercise of the rights granted hereunder. You may not sublicense the Work. You must keep intact all notices that refer to this License and to the disclaimer of warranties. You may not distribute the Executable Files or Source Code with any technological measures that control access or use of the Work in a manner inconsistent with the terms of this License.

f. You agree not to use the Work for illegal, immoral or improper purposes, or on pages containing illegal, immoral or improper material. The Work is subject to applicable export laws. You agree to comply with all such laws and regulations that may apply to the Work after Your receipt of the Work.

6. Representations, Warranties and Disclaimer. THIS WORK IS PROVIDED "AS IS", "WHERE IS" AND "AS AVAILABLE", WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS OR GUARANTEES. YOU, THE USER, ASSUME ALL RISK IN ITS USE, INCLUDING COPYRIGHT INFRINGEMENT, PATENT INFRINGEMENT, SUITABILITY, ETC. AUTHOR EXPRESSLY DISCLAIMS ALL EXPRESS, IMPLIED OR STATUTORY WARRANTIES OR CONDITIONS, INCLUDING WITHOUT LIMITATION, WARRANTIES OR CONDITIONS OF MERCHANTABILITY, MERCHANTABLE QUALITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF TITLE OR NON-INFRINGEMENT, OR THAT THE WORK (OR ANY PORTION THEREOF) IS CORRECT, USEFUL, BUG-FREE OR FREE OF VIRUSES. YOU MUST PASS THIS DISCLAIMER ON WHENEVER YOU DISTRIBUTE THE WORK OR DERIVATIVE WORKS.

7. Indemnity. You agree to defend, indemnify and hold harmless the Author and the Publisher from and against any claims, suits, losses, damages, liabilities, costs, and expenses (including reasonable legal or attorneys' fees) resulting from or relating to any use of the Work by You.

8. Limitation on Liability. EXCEPT TO THE EXTENT REQUIRED BY APPLICABLE LAW, IN NO EVENT WILL THE AUTHOR OR THE PUBLISHER BE LIABLE TO YOU ON ANY LEGAL THEORY FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES ARISING OUT OF THIS LICENSE OR THE USE OF THE WORK OR OTHERWISE, EVEN IF THE AUTHOR OR THE PUBLISHER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

9. Termination.

a. This License and the rights granted hereunder will terminate automatically upon any breach by You of any term of this License. Individuals or entities who have received Derivative Works from You under this License, however, will not have their licenses terminated provided such individuals or entities remain in full compliance with those licenses. Sections 1, 2, 6, 7, 8, 9, 10 and 11 will survive any termination of this License.

b. If You bring a copyright, trademark, patent or any other infringement claim against any contributor over infringements You claim are made by the Work, your License from such contributor to the Work ends automatically.

c. Subject to the above terms and conditions, this License is perpetual (for the duration of the applicable copyright in the Work). Notwithstanding the above, the Author reserves the right to release the Work under different license terms or to stop distributing the Work at any time; provided, however that any such election will not serve to withdraw this License (or any other license that has been, or is required to be, granted under the terms of this License), and this License will continue in full force and effect unless terminated as stated above.

10. Publisher. The parties hereby confirm that the Publisher shall not, under any circumstances, be responsible for and shall not have any liability in respect of the subject matter of this License. The Publisher makes no warranty whatsoever in connection with the Work and shall not be liable to You or any party on any legal theory for any damages whatsoever, including without limitation any general, special, incidental or consequential damages arising in connection to this license. The Publisher reserves the right to cease making the Work available to You at any time without notice

11. Miscellaneous

a. This License shall be governed by the laws of the location of the head office of the Author or if the Author is an individual, the laws of location of the principal place of residence of the Author.

b. If any provision of this License is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this License, and without further action by the parties to this License, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

c. No term or provision of this License shall be deemed waived and no breach consented to unless such waiver or consent shall be in writing and signed by the party to be charged with such waiver or consent.

d. This License constitutes the entire agreement between the parties with respect to the Work licensed herein. There are no understandings, agreements or representations with respect to the Work not specified herein. The

Author shall not be bound by any additional provisions that may appear in any communication from You. This License may not be modified without the mutual written agreement of the Author and You.

flex 2.5.25/27

Flex carries the copyright used for BSD software, slightly modified because it originated at the Lawrence Berkeley (not Livermore!) Laboratory, which operates under a contract with the Department of Energy:

Copyright (c) 2001 by W. L. Estes <wlestes@uncg.edu>

Copyright (c) 1990, 1997 The Regents of the University of California.

All rights reserved.

This code is derived from software contributed to Berkeley by Vern Paxson.

The United States Government has rights in this work pursuant to contract no. DE-AC03-76SF00098 between the United States Department of Energy and the University of California.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

This basically says "do whatever you please with this software except remove this notice or take advantage of the University's (or the flex authors') name".

Note that the "flex.skl" scanner skeleton carries no copyright notice.

You are free to do whatever you please with scanners generated using flex; for them, you are not even bound by the above copyright.

GPL (GNU General Public License) 2.0

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to

using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights.

These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in

the term "modification".) Each licensee is addressed as "you". Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the

entire whole, and thus to each and every part regardless of who wrote it. Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is

void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot

impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY

YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

As a special exception, you may use this file as part of a free software library without restriction. Specifically, if other files instantiate templates or use macros or inline functions from this file, or you compile this file and link it with other files to produce an executable, this file does not by itself cause the resulting executable to be covered by the GNU General Public License. This exception does not however invalidate any other reasons why the executable file might be covered by the GNU General Public License.

END OF TERMS AND CONDITIONS

GPL (GNU General Public License) 3

GNU GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. <<http://fsf.org/>>

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive

or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps:

(1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents.

States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS

0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for

infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those

subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice;

keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

a) The work must carry prominent notices stating that you modified it, and giving a relevant date.

b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".

c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.

d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium

customarily used for software interchange.

b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.

d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user

actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions.

Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of

it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission. Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under

this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may

not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties

receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to

address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

<program> Copyright (C) <year> <name of author>

This program comes with ABSOLUTELY NO WARRANTY; for details type `show w`.

This is free software, and you are welcome to redistribute it under certain conditions; type `show c` for details.

The hypothetical commands `show w` and `show c` should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary.

For more information on this, and how to apply and follow the GNU GPL, see <<http://www.gnu.org/licenses/>>.

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read <<http://www.gnu.org/philosophy/why-not-lgpl.html>>.

LGPL (GNU Lesser General Public License) 2.1

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.

51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original

author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license. Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run

that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

GNU LESSER GENERAL PUBLIC LICENSE

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License").

Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a

fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so

that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License.

Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not.

Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may

distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
 - b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
 - c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
 - d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
 - e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.
- For an executable, the required form of the "work that uses the

Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further

restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances. It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns. Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and

conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

Copyright (C)

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version. This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

, 1 April 1990

Ty Coon, President of Vice

That's all there is to it!

Net-SNMP

License

Various copyrights apply to this package, listed in various separate parts below. Please make sure that you read all the parts. Up until 2001, the project was based at UC Davis, and the first part covers all code written during this time. From 2001 onwards, the project has been based at SourceForge, and Networks Associates Technology, Inc hold the copyright on behalf of the wider Net-SNMP community, covering all derivative work done since then. An additional copyright section has been added as Part 3 below also under a BSD license for the work contributed by Cambridge Broadband Ltd. to the project since 2001.

An additional copyright section has been added as Part 4 below also under a BSD license for the work contributed by Sun Microsystems, Inc. to the project since 2003.

Code has been contributed to this project by many people over the years it has been in development, and a full list of contributors can be found in the README file under the THANKS section.

---- Part 1: CMU/UCD copyright notice: (BSD like) ----

Copyright 1989, 1991, 1992 by Carnegie Mellon University

Derivative Work - 1996, 1998-2000

Copyright 1996, 1998-2000 The Regents of the University of California

All Rights Reserved

Permission to use, copy, modify and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of CMU and The Regents of the University of California not be used in advertising or publicity pertaining to distribution of the software without specific written permission.

CMU AND THE REGENTS OF THE UNIVERSITY OF CALIFORNIA DISCLAIM ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND

FITNESS. IN NO EVENT SHALL CMU OR THE REGENTS OF THE UNIVERSITY OF CALIFORNIA BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM THE LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

---- Part 2: Networks Associates Technology, Inc copyright notice (BSD) ----

Copyright (c) 2001-2003, Networks Associates Technology, Inc

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of the Networks Associates Technology, Inc nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 3: Cambridge Broadband Ltd. copyright notice (BSD) ----

Portions of this code are copyright (c) 2001-2003, Cambridge Broadband Ltd.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* The name of Cambridge Broadband Ltd. may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDER ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 4: Sun Microsystems, Inc. copyright notice (BSD) ----

Copyright © 2003 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.

Use is subject to license terms below.

This distribution may include materials developed by third parties.

Sun, Sun Microsystems, and the Sun logo are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

- * Neither the name of the Sun Microsystems, Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 5: Sparta, Inc copyright notice (BSD) ----

Copyright (c) 2003-2006, Sparta, Inc

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

- * Neither the name of Sparta, Inc nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 6: Cisco/BUPTNIC copyright notice (BSD) ----

Copyright (c) 2004, Cisco, Inc and Information Network

Center of Beijing University of Posts and Telecommunications.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of Cisco, Inc, Beijing University of Posts and Telecommunications, nor the names of their contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 7: Fabasoft R&D Software GmbH & Co KG copyright notice (BSD) ----

Copyright (c) Fabasoft R&D Software GmbH & Co KG, 2003

oss@fabasoft.com

Author: Bernhard Penz

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* The name of Fabasoft R&D Software GmbH & Co KG or any of its subsidiaries, brand or product names may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDER "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

OpenSSL 3.1.2

License

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions. "License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document. "Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License. "Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity. "You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License. "Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files. "Object" form

shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types. "Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below). "Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof. "Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution." "Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions: (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and (b) You must cause any modified files to carry prominent notices stating that You changed the files; and (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License. You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or

product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file. 7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License. 8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages. 9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability. END OF TERMS AND CONDITIONS

Netscape Public License Version 1.1

AMENDMENTS

The Netscape Public License Version 1.1 ("NPL") consists of the Mozilla Public License Version 1.1 with the following Amendments, including Exhibit A-Netscape Public License. Files identified with "Exhibit A-Netscape Public License" are governed by the Netscape Public License Version 1.1.

Additional Terms applicable to the Netscape Public License.

I. Effect.

These additional terms described in this Netscape Public License -- Amendments shall apply to the Mozilla Communicator client code and to all Covered Code under this License.

II. "Netscape's Branded Code" means Covered Code that Netscape distributes and/or permits others to distribute under one or more trademark(s) which are controlled by Netscape but which are not licensed for use under this License.

III. Netscape and logo.

This License does not grant any rights to use the trademarks "Netscape", the "Netscape N and horizon" logo or the "Netscape lighthouse" logo, "Netcenter", "Gecko", "Java" or "JavaScript", "Smart Browsing" even if such marks are included in the Original Code or Modifications.

IV. Inability to Comply Due to Contractual Obligation.

Prior to licensing the Original Code under this License, Netscape has licensed third party code for use in Netscape's Branded Code. To the extent that Netscape is limited contractually from making such third party code available under this License, Netscape may choose to reintegrate such code into Covered Code without being required to distribute such code in Source Code form, even if such code would otherwise be considered "Modifications" under this License.

V. Use of Modifications and Covered Code by Initial Developer.

V.1. In General.

The obligations of Section 3 apply to Netscape, except to the extent specified in this Amendment, Section V.2 and V.3.

V.2. Other Products.

Netscape may include Covered Code in products other than the Netscape's Branded Code which are released by Netscape during the two (2) years following the release date of the Original Code, without such additional products becoming subject to the terms of this License, and may license such additional products on different terms from those contained in this License.

V.3. Alternative Licensing.

Netscape may license the Source Code of Netscape's Branded Code, including Modifications incorporated therein, without such Netscape Branded Code becoming subject to the terms of this License, and may license such Netscape Branded Code on different terms from those contained in this License.

VI. Litigation.

Notwithstanding the limitations of Section 11 above, the provisions regarding litigation in Section 11(a), (b) and (c) of the License shall apply to all disputes relating to this License.

EXHIBIT A-Netscape Public License.

"The contents of this file are subject to the Netscape Public License Version 1.1 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at <http://www.mozilla.org/NPL/>

Software distributed under the License is distributed on an "AS IS" basis, WITHOUT WARRANTY OF ANY KIND, either express or implied. See the License for the specific language governing rights and limitations under the License.

The Original Code is Mozilla Communicator client code, released March 31, 1998.

The Initial Developer of the Original Code is Netscape Communications Corporation. Portions created by Netscape are Copyright (C) 1998-1999 Netscape Communications Corporation. All Rights Reserved.

Contributor(s): _____.

Alternatively, the contents of this file may be used under the terms of the _____ license (the "[] License"), in which case the provisions of [] License are applicable instead of those above. If you wish to allow use of your version of this file only under the terms of the [] License and not to allow others to use your version of this file under the NPL, indicate your decision by deleting the provisions above and replace them with the notice and other provisions required by the [] License. If you do not delete the provisions above, a recipient may use your version of this file under either the NPL or the [] License."

MOZILLA PUBLIC LICENSE

Version 1.1

1. Definitions.

1.0.1. "Commercial Use" means distribution or otherwise making the Covered Code available to a third party.

1.1. "Contributor" means each entity that creates or contributes to the creation of Modifications.

1.2. "Contributor Version" means the combination of the Original Code, prior Modifications used by a Contributor, and the Modifications made by that particular Contributor.

1.3. "Covered Code" means the Original Code or Modifications or the combination of the Original Code and Modifications, in each case including portions thereof.

1.4. "Electronic Distribution Mechanism" means a mechanism generally accepted in the software development community for the electronic transfer of data.

1.5. "Executable" means Covered Code in any form other than Source Code.

1.6. "Initial Developer" means the individual or entity identified as the Initial Developer in the Source Code notice required by Exhibit A.

1.7. "Larger Work" means a work which combines Covered Code or portions thereof with code not governed by the terms of this License.

1.8. "License" means this document.

1.8.1. "Licensable" means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently acquired, any and all of the rights conveyed herein.

1.9. "Modifications" means any addition to or deletion from the substance or structure of either the Original Code or any previous Modifications. When Covered Code is released as a series of files, a Modification is:

A. Any addition to or deletion from the contents of a file containing Original Code or previous Modifications.

B. Any new file that contains any part of the Original Code or previous Modifications.

1.10. "Original Code" means Source Code of computer software code which is described in the Source Code notice required by Exhibit A as Original Code, and which, at the time of its release under this License is not already Covered Code governed by this License.

1.10.1. "Patent Claims" means any patent claim(s), now owned or hereafter acquired, including without limitation, method, process, and apparatus claims, in any patent Licensable by grantor.

1.11. "Source Code" means the preferred form of the Covered Code for making modifications to it, including all modules it contains, plus any associated interface definition files, scripts used to control compilation and installation of an Executable, or source code differential comparisons against either the Original Code or another well known, available Covered Code of the Contributor's choice. The Source Code can be in a compressed or archival form, provided the appropriate decompression or de-archiving software is widely available for no charge.

1.12. "You" (or "Your") means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License or a future version of this License issued under Section 6.1. For legal entities, "You" includes any entity which controls, is controlled by, or is under common control with You. For purposes of this definition, "control" means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

2. Source Code License.

2.1. The Initial Developer Grant.

The Initial Developer hereby grants You a world-wide, royalty-free, non-exclusive license, subject to third party intellectual property claims:

(a) under intellectual property rights (other than patent or trademark) Licensable by Initial Developer to use, reproduce, modify, display, perform, sublicense and distribute the Original Code (or portions thereof) with or without Modifications, and/or as part of a Larger Work; and

(b) under Patents Claims infringed by the making, using or selling of Original Code, to make, have made, use, practice, sell, and offer for sale, and/or otherwise dispose of the Original Code (or portions thereof).

(c) the licenses granted in this Section 2.1(a) and (b) are effective on the date Initial Developer first distributes Original Code under the terms of this License.

(d) Notwithstanding Section 2.1(b) above, no patent license is granted: 1) for code that You delete from the Original Code; 2) separate from the Original Code; or 3) for infringements caused by: i) the modification of the Original Code or ii) the combination of the Original Code with other software or devices.

2.2. Contributor Grant.

Subject to third party intellectual property claims, each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license

(a) under intellectual property rights (other than patent or trademark) Licensable by Contributor, to use, reproduce, modify, display, perform, sublicense and distribute the Modifications created by such Contributor (or portions thereof) either on an unmodified basis, with other Modifications, as Covered Code and/or as part of a Larger Work; and

(b) under Patent Claims infringed by the making, using, or selling of Modifications made by that Contributor either alone and/or in combination with its Contributor Version (or portions of such combination), to make, use, sell, offer for sale, have made, and/or otherwise dispose of: 1) Modifications made by that Contributor (or portions thereof); and 2) the combination of Modifications made by that Contributor with its Contributor Version (or portions of such combination).

(c) the licenses granted in Sections 2.2(a) and 2.2(b) are effective on the date Contributor first makes Commercial Use of the Covered Code.

(d) Notwithstanding Section 2.2(b) above, no patent license is granted: 1) for any code that Contributor has deleted from the Contributor Version; 2) separate from the Contributor Version; 3) for infringements caused by: i) third party modifications of Contributor Version or ii) the combination of Modifications made by that Contributor with other software (except as part of the Contributor Version) or other devices; or 4) under Patent Claims infringed by Covered Code in the absence of Modifications made by that Contributor.

3. Distribution Obligations.

3.1. Application of License.

The Modifications which You create or to which You contribute are governed by the terms of this License, including without limitation Section 2.2. The Source Code version of Covered Code may be distributed only under the terms of this License or a future version of this License released under Section 6.1, and You must include a copy of this License with every copy of the Source Code You distribute. You may not offer or impose any terms on any Source Code version that alters or restricts the applicable version of this License or the recipients' rights hereunder. However, You may include an additional document offering the additional rights described in Section 3.5.

3.2. Availability of Source Code.

Any Modification which You create or to which You contribute must be made available in Source Code form under the terms of this License either on the same media as an Executable version or via an accepted Electronic Distribution Mechanism to anyone to whom you made an Executable version available; and if made available via Electronic Distribution Mechanism, must remain available for at least twelve (12) months after the date it initially became available, or at least six (6) months after a subsequent version of that particular Modification has been made available to such recipients. You are responsible for ensuring that the Source Code version remains available even if the Electronic Distribution Mechanism is maintained by a third party.

3.3. Description of Modifications.

You must cause all Covered Code to which You contribute to contain a file documenting the changes You made to create that Covered Code and the date of any change. You must include a prominent statement that the Modification is derived, directly or indirectly, from Original Code provided by the Initial Developer and including the name of the Initial Developer in (a) the Source Code, and (b) in any notice in an Executable version or related documentation in which You describe the origin or ownership of the Covered Code.

3.4. Intellectual Property Matters

(a) Third Party Claims.

If Contributor has knowledge that a license under a third party's intellectual property rights is required to exercise the rights granted by such Contributor under Sections 2.1 or 2.2, Contributor must include a text file with the Source Code distribution titled "LEGAL" which describes the claim and the party making the claim in sufficient detail that a recipient will know whom to contact. If Contributor obtains such knowledge after the Modification is made available as described in Section 3.2, Contributor shall promptly modify the LEGAL file in all copies Contributor makes available thereafter and shall take other steps (such as notifying appropriate mailing lists or newsgroups) reasonably calculated to inform those who received the Covered Code that new knowledge has been obtained.

(b) Contributor APIs.

If Contributor's Modifications include an application programming interface and Contributor has knowledge of patent licenses which are reasonably necessary to implement that API, Contributor must also include this information in the LEGAL file.

(c) Representations.

Contributor represents that, except as disclosed pursuant to Section 3.4(a) above, Contributor believes that Contributor's Modifications are Contributor's original creation(s) and/or Contributor has sufficient rights to grant the rights conveyed by this License.

3.5. Required Notices.

You must duplicate the notice in Exhibit A in each file of the Source Code. If it is not possible to put such notice in a particular Source Code file due to its structure, then You must include such notice in a location (such as a relevant directory) where a user would be likely to look for such a notice. If You created one or more Modification(s) You may add your name as a Contributor to the notice described in Exhibit A. You must also duplicate this License in any documentation for the Source Code where You describe recipients' rights or ownership rights relating to Covered Code. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Code. However, You may do so only on Your own behalf, and not on behalf of the Initial Developer or any Contributor. You must make it absolutely clear than any such warranty, support, indemnity or liability obligation is offered by You alone, and You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of warranty, support, indemnity or liability terms You offer.

3.6. Distribution of Executable Versions.

You may distribute Covered Code in Executable form only if the requirements of Section 3.1-3.5 have been met for that Covered Code, and if You include a notice stating that the Source Code version of the Covered Code is available under the terms of this License, including a description of how and where You have fulfilled the obligations of Section 3.2. The notice must be conspicuously included in any notice in an Executable version, related documentation or collateral in which You describe recipients' rights relating to the Covered Code. You may distribute the Executable version of Covered Code or ownership rights under a license of Your choice, which may contain terms different from this License, provided that You are in compliance with the terms of this License and that the license for the Executable version does not attempt to limit or alter the recipient's rights in the Source Code version from the rights set forth in this License. If You distribute the Executable version under a different license You must make it absolutely clear that any terms which differ from this License are offered by You alone, not by the Initial Developer or any Contributor. You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of any such terms You offer.

3.7. Larger Works.

You may create a Larger Work by combining Covered Code with other code not governed by the terms of this License and distribute the Larger Work as a single product. In such a case, You must make sure the requirements of this License are fulfilled for the Covered Code.

4. Inability to Comply Due to Statute or Regulation.

If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Code due to statute, judicial order, or regulation then You must: (a) comply with the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be included in the LEGAL file described in Section 3.4 and must be included with all distributions of the Source Code. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it.

5. Application of this License.

This License applies to code to which the Initial Developer has attached the notice in Exhibit A and to related Covered Code.

6. Versions of the License.

6.1. New Versions.

Netscape Communications Corporation ("Netscape") may publish revised and/or new versions of the License from time to time. Each version will be given a distinguishing version number.

6.2. Effect of New Versions.

Once Covered Code has been published under a particular version of the License, You may always continue to use it under the terms of that version. You may also choose to use such Covered Code under the terms of any subsequent version of the License published by Netscape. No one other than Netscape has the right to modify the terms applicable to Covered Code created under this License.

6.3. Derivative Works.

If You create or use a modified version of this License (which you may only do in order to apply it to code which is not already Covered Code governed by this License), You must (a) rename Your license so that the phrases "Mozilla", "MOZILLAPL", "MOZPL", "Netscape", "MPL", "NPL" or any confusingly similar phrase do not appear in your license (except to note that your license differs from this License) and (b) otherwise make it clear that Your version of the license contains terms which differ from the Mozilla Public License and Netscape Public License. (Filling in the name of the Initial Developer, Original Code or Contributor in the notice described in Exhibit A shall not of themselves be deemed to be modifications of this License.)

7. DISCLAIMER OF WARRANTY.

COVERED CODE IS PROVIDED UNDER THIS LICENSE ON AN "AS IS" BASIS, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES THAT THE COVERED CODE IS FREE OF DEFECTS, MERCHANTABILITY, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE COVERED CODE IS WITH YOU. SHOULD ANY COVERED CODE PROVE DEFECTIVE IN ANY RESPECT, YOU (NOT THE INITIAL DEVELOPER OR ANY OTHER CONTRIBUTOR) ASSUME THE COST OF ANY NECESSARY SERVICING, REPAIR OR CORRECTION. THIS DISCLAIMER OF WARRANTY CONSTITUTES AN ESSENTIAL PART OF THIS LICENSE. NO USE OF ANY COVERED CODE IS AUTHORIZED HEREUNDER EXCEPT UNDER THIS DISCLAIMER.

8. TERMINATION.

8.1. This License and the rights granted hereunder will terminate automatically if You fail to comply with terms herein and fail to cure such breach within 30 days of becoming aware of the breach. All sublicenses to the Covered Code which are properly granted shall survive any termination of this License. Provisions which, by their nature, must remain in effect beyond the termination of this License shall survive.

8.2. If You initiate litigation by asserting a patent infringement claim (excluding declaratory judgment actions) against Initial Developer or a Contributor (the Initial Developer or Contributor against whom You file such action is referred to as "Participant") alleging that:

(a) such Participant's Contributor Version directly or indirectly infringes any patent, then any and all rights granted by such Participant to You under Sections 2.1 and/or 2.2 of this License shall, upon 60 days notice from Participant terminate prospectively, unless if within 60 days after receipt of notice You either: (i) agree in writing to pay Participant a mutually agreeable reasonable royalty for Your past and future use of Modifications made by such Participant, or (ii) withdraw Your litigation claim with respect to the Contributor Version against such Participant. If within 60 days of notice, a reasonable royalty and payment arrangement are not mutually agreed upon in writing by the parties or the litigation claim is not withdrawn, the rights granted by Participant to You under Sections 2.1 and/or 2.2 automatically terminate at the expiration of the 60 day notice period specified above.

(b) any software, hardware, or device, other than such Participant's Contributor Version, directly or indirectly infringes any patent, then any rights granted to You by such Participant under Sections 2.1(b) and 2.2(b) are revoked effective as of the date You first made, used, sold, distributed, or had made, Modifications made by that Participant.

8.3. If You assert a patent infringement claim against Participant alleging that such Participant's Contributor Version directly or indirectly infringes any patent where such claim is resolved (such as by license or settlement) prior to the initiation of patent infringement litigation, then the reasonable value of the licenses granted by such Participant under Sections 2.1 or 2.2 shall be taken into account in determining the amount or value of any payment or license.

8.4. In the event of termination under Sections 8.1 or 8.2 above, all end user license agreements (excluding distributors and resellers) which have been validly granted by You or any distributor hereunder prior to termination shall survive termination.

9. LIMITATION OF LIABILITY.

UNDER NO CIRCUMSTANCES AND UNDER NO LEGAL THEORY, WHETHER TORT (INCLUDING NEGLIGENCE), CONTRACT, OR OTHERWISE, SHALL YOU, THE INITIAL DEVELOPER, ANY OTHER CONTRIBUTOR, OR ANY DISTRIBUTOR OF COVERED CODE, OR ANY SUPPLIER OF ANY OF SUCH PARTIES, BE LIABLE TO ANY PERSON FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL

DAMAGES OF ANY CHARACTER INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF GOODWILL, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, OR ANY AND ALL OTHER COMMERCIAL DAMAGES OR LOSSES, EVEN IF SUCH PARTY SHALL HAVE BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION OF LIABILITY SHALL NOT APPLY TO LIABILITY FOR DEATH OR PERSONAL INJURY RESULTING FROM SUCH PARTY'S NEGLIGENCE TO THE EXTENT APPLICABLE LAW PROHIBITS SUCH LIMITATION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS EXCLUSION AND LIMITATION MAY NOT APPLY TO YOU.

10. U.S. GOVERNMENT END USERS.

The Covered Code is a "commercial item," as that term is defined in 48 C.F.R. 2.101 (Oct. 1995), consisting of "commercial computer software" and "commercial computer software documentation," as such terms are used in 48 C.F.R. 12.212 (Sept. 1995). Consistent with 48 C.F.R. 12.212 and 48 C.F.R. 227.7202-1 through 227.7202-4 (June 1995), all U.S. Government End Users acquire Covered Code with only those rights set forth herein.

11. MISCELLANEOUS.

This License represents the complete agreement concerning subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. This License shall be governed by California law provisions (except to the extent applicable law, if any, provides otherwise), excluding its conflict-of-law provisions. With respect to disputes in which at least one party is a citizen of, or an entity chartered or registered to do business in the United States of America, any litigation relating to this License shall be subject to the jurisdiction of the Federal Courts of the Northern District of California, with venue lying in Santa Clara County, California, with the losing party responsible for costs, including without limitation, court costs and reasonable attorneys' fees and expenses. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not apply to this License.

12. RESPONSIBILITY FOR CLAIMS.

As between Initial Developer and the Contributors, each party is responsible for claims and damages arising, directly or indirectly, out of its utilization of rights under this License and You agree to work with Initial Developer and Contributors to distribute such responsibility on an equitable basis. Nothing herein is intended or shall be deemed to constitute any admission of liability.

13. MULTIPLE-LICENSED CODE.

Initial Developer may designate portions of the Covered Code as "Multiple-Licensed". "Multiple-Licensed" means that the Initial Developer permits you to utilize portions of the Covered Code under Your choice of the NPL or the alternative licenses, if any, specified by the Initial Developer in the file described in Exhibit A.

EXHIBIT A -Mozilla Public License.

``The contents of this file are subject to the Mozilla Public License Version 1.1 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

<http://www.mozilla.org/MPL/>

Software distributed under the License is distributed on an "AS IS" basis, WITHOUT WARRANTY OF ANY KIND, either express or implied. See the License for the specific language governing rights and limitations under the License.

The Original Code is _____.

The Initial Developer of the Original Code is _____. Portions created by _____ are Copyright (C) _____. All Rights

Reserved.

Contributor(s): _____.

Alternatively, the contents of this file may be used under the terms of the _____ license (the "[] License"), in which case the provisions of [] License are applicable instead of those above. If you wish to allow use of your version of this file only under the terms of the [] License and not to allow others to use your version of

this file under the MPL, indicate your decision by deleting the provisions above and replace them with the notice and other provisions required by the [] License. If you do not delete the provisions above, a recipient may use your version of this file under either the MPL or the [] License."

[NOTE: The text of this Exhibit A may differ slightly from the text of the notices in the Source Code files of the Original Code. You should use the text of this Exhibit A rather than the text found in the Original Code Source Code for Your Modifications.]

zlib

/* zlib.h -- interface of the 'zlib' general purpose compression library version 1.2.13, October 13th, 2022.

Copyright (C) 1995-2022 Jean-loup Gailly and Mark Adler

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

Jean-loup Gailly jloup@gzip.org

Mark Adler madler@alumni.caltech.edu

*/

© 2023 Quest Software Inc. ALL RIGHTS RESERVED.

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Quest Software Inc.

The information in this document is provided in connection with Quest Software products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Quest Software products. EXCEPT AS SET FORTH IN THE TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, QUEST SOFTWARE ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL QUEST SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF QUEST SOFTWARE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Quest Software makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Quest Software does not make any commitment to update the information contained in this document.

If you have any questions regarding your potential use of this material, contact:

Quest Software Inc.

Attn: LEGAL Dept

4 Polaris Way

Aliso Viejo, CA 92656

Refer to our Web site (<https://www.quest.com>) for regional and international office information.

Patents

Quest Software is proud of our advanced technology. Patents and pending patents may apply to this product. For the most current information about applicable patents for this product, please visit our website at <https://www.quest.com/legal>.

Trademarks

Quest, the Quest logo, and Join the Innovation are trademarks and registered trademarks of Quest Software Inc. For a complete list of Quest marks, visit <https://www.quest.com/legal/trademark-information.aspx>. All other trademarks and registered trademarks are property of their respective owners.

Legend

-  **CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.**
-  **IMPORTANT, NOTE, TIP, MOBILE, or VIDEO:** An information icon indicates supporting information.

InTrust Release Notes

Updated - November 2023

Version - 11.6.0