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# Apelon Distributed Terminology System (DTS)

DTS Installation Guide (for Windows)

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# Introduction

The *Apelon DTS Installation Guide* for *Windows* includes installation procedures and requirements for the Apelon Distributed Terminology System (DTS). This guide was prepared to help new and experienced administrators successfully perform all operations necessary to install the Apelon DTS product.

Refer to the *Knowledgebase Administrators Guide* for procedures on creating the required DTS schema, and for populating the DTS tables with vocabulary subscription data provided by Apelon, data migrated from your current DTS database, or data from a TDE schema. For instructions on how to configure and run the DTS Server, refer to the *DTS Server Operations Guide*.

Matching capabilities that are available during knowledgebase searches are described in the *DTS Matching – Quick Overview*. Preparation of the knowledgebase to support these matching capabilities is detailed in the *Knowledgebase Administrators Guide*.

# **Apelon DTS Installation for Windows**

This section details the procedures necessary to install and uninstall Apelon DTS. These procedures assume that the prerequisite software (listed below) has been installed, and is capable of supporting these applications.

# **Installation Requirements**

The following are minimum system and software requirements to install and run DTS.

#### Minimum System Requirements (Server)

- 2 GHz or above
- 2 Gigabyte RAM
- 30/40 GB free space (depending on content size) 50G available hard drive space
  - This is the recommended available hard drive space, based on a single hard drive being used for both the DTS Server and a DTS Knowledge base configured with SNOMED
  - Actual available hard drive space must be sufficient to accommodate the DTS installation (~200M) as well as the space requirements for your specific knowledgebase configuration

#### Minimum Software Requirements (Server)

- Windows 2003, Windows 2000, or Linux server (for DTS Server only)
- Internet Explorer **6.0** or above , or Firefox
- Oracle Version 9i release 2 or 10g
- Or, Microsoft SQL 2005 Server or 2000
- DTS 3.5 includes Version 1.5 or JRE and Tomcat
- One of the following:
  - Oracle 9i Standard or Enterprise Edition
  - Oracle 10g Standard or Enterprise Edition
  - MS SQL Server 2000 or MS SQL Server 2005
    - For Microsoft SQL Server connections, Apelon recommends that you obtain and install the i-net Sprinta Enterprise<sup>TM</sup> driver (not included); this driver allows the multiple connections required to run and use DTS

You can obtain information on the driver at: <a href="http://www.inetsoftware.de/products/jdbc/mssql/sprinta/">http://www.inetsoftware.de/products/jdbc/mssql/sprinta/</a>

- Note: If Microsoft SQL Server is used, an SQL Server Type 4 JDBC driver also is required (the default Microsoft drivers are provided)
- DTS 3.5 includes Version 1.5 of the Sun Java Runtime Environment (JRE)
  - DTS 3.5 software was compiled using JDK Version 1.5.0
  - This installation of Java 1.5 will be visible to DTS only (existing Java installations on the target machine are not affected)

#### **DTS.NET**

- NET Framework Version 1.1.
  - o Requires separate download of the corresponding DTS .NET dll
  - Windows .NET support is limited to DTS API's for use in .NET application development environments

### **Install Apelon DTS**

Follow this procedure to install DTS. The installation process creates DTS directories on your machine and populates them with the files required to run DTS.

**Note**: You can retain previous versions of DTS on the same machine (i.e., there is no requirement to uninstall earlier DTS versions). Refer to the <u>Uninstall Previous DTS</u> <u>Versions (Optional)</u> discussion later in this section for uninstall procedures.

- 1. From your custom Apelon Web page, **download** the current version of Apelon DTS to a local drive on your *Windows* PC, then **save** this version.
- 2. Click the **Apelon DTS** link to run the **InstallShield** wizard, which guides you through the installation process.



3. Click **Next** in the *Welcome* window. When the *Choose Destination Location* window displays, note that there is a default installation path which will be referred to as *DTSInstall* throughout this document.

InstallShield Wizard		×
Choose Destination Location		
Select folder where Setup will install files.		
Setup will install Apelon DTS in the following fo	lder.	
To install to this folder, click Next. To install to a another folder.	a different folder, click Brow	se and select
- Destination Folder		
C:\Program Files\Apelon\DTS 3.4.1		Browse
InstallShield		
	< Back Next >	Cancel

Earlier DTS versions, installed in other folders, may remain on the same machine.

- 4. Click **Next** to install Apelon DTS in the default destination folder, or click **Browse** to select another folder, then click **Next**.
- 5. At this point the *Select Components* window displays. As part of the installation, you are asked to select which of the Apelon DTS components you want installed. The DTS components are listed.
  - Browser

- Editor
- KB Administration
- Selector & Extractor
- Server
- Server Administration (you must install this component to use the DTS User Manager application)

The default is to install all of the DTS components. Click the corresponding checkbox to deselect each undesired component.

InstallShield Wizard		<u> </u>
Select Components Choose the components Setup will install.		Apelon Nedical Terminology in Practice
Select the components you want to install, install. Browser	, and clear the co	omponents you do not want to Description
Database Support  Oracle  MS SQL Server - Microsoft  MS SQL Server - Sprinta  Seltor  KB Administration  Selector & Extractor  Server  Server		A servlet that enables browsing of a DTS database from a Web browser.
Space Required on C: Space Available on C:	182300 K 33035084 K	
nstallShield —	< Back	Next > Cancel

You can install all of the DTS components on the same machine, or install one or more components on separate machines. If you install components on separate machines, these machines must be connected by a network.

- To run classification of Ontylog Extension namespaces, you must install the **Modular Classifier** for each Ontylog subscription namespace that is linked to an Extension namespace.
  - Select the **Modular Classification Support** component to install the **Modular Classification Deployment Wizard**.
  - Refer to the *Modular Classifier Installation and Setup* discussions in the *Ontylog Extension Namespaces and Extension Namespace Classification in DTS* document for procedures.
- Under **Database Support**, you must specify the database on which you maintain your DTS Knowledgebase, and the driver through which the DTS Server and the DTS Editor will access the data; the appropriate DTS configuration files are updated to reflect this selection.

- **Oracle** (the default) applies if you have installed either **Oracle 10g** or **Oracle 9i** to maintain your knowledgebase
- Click MS SQL Server Microsoft if you will maintain the knowledgebase in a *Microsoft* SQL Server database, and use the *Microsoft* JDBC driver; the default *Microsoft* driver is installed automatically
- Click **MS SQL Server Sprinta** if you will maintain the knowledgebase in a *Microsoft* SQL Server database, and use the I-Net Sprinta JDBC driver
  - Note: For Microsoft SQL Server connections, Apelon recommends that you install the iSprinta Enterprise<sup>™</sup> driver (not included)
  - The **iSprinta Enterprise** driver provides the multiple connections required to run and use DTS
- 6. Click **Next** to begin installing the selected components in the location you specified. When the *Install Complete* window displays, click **Finish**.

InstallShield Wizard		
	Apelon Install Complete	
Apelon	Setup has finished installing Apelon DTS on your computer.	
Medical Terminology in Practice		
	Click to view the README file.	
	< Back <b>Finish</b> Cancel	

7. After you install Apelon DTS, a selection for **it has been** added to the *Windows* **Start** menu. Click **Apelon>DTSInstall** to display the DTS submenu.



Click **Documentation** to display the list of DTS User guides provided for your reference. Procedures for using the DTS components are included in these guides.

# **Uninstall Previous DTS Versions (Optional)**

There is no need to uninstall any previous version(s) of DTS prior to installing the current version. However, you may find it necessary or practical to delete one or more DTS versions (e.g., DTS 3.4) from your machine for maintenance purposes.

Use the **Add/Remove Programs** tool included with the Microsoft  $Windows^{TM}$  operating system to uninstall these previous DTS version(s).

- 1. Navigate to the **Start>Settings>Control Panel**.
- 2. Select Add/Remove Programs.
- 3. Scroll down the list of programs and locate the previous DTS version you want to uninstall (e.g., **DTS 3.4**) then click to select it.

ł	Apelon DTS 3.4	Size	<u>3.91M8</u>
	To change this program or remove & from your computer, did-change/Remove,	Change	Remove
ĺ	関 Apelon DTS Workflow Client Plugin 3.4	Size	1.02MB
ĺ	🛃 Apelon DTS Workflow Server Plugin 3.4	Size	0.98MB
ĺ	🛃 Apelon KB Type Editor	Size	1.29MB

You can **individually** select any, or all, previous DTS versions to be removed.

4. Click **Change/Remove** to uninstall the selected DTS version. The following window displays.

InstallShield W	izard
Welcome Modify, repai	ir, or remove the program.
Welcome to current insta	the Apelon DTS Setup Maintenance program. This program lets you modify the llation. Click one of the options below.
C Modify	
ß	Select new program components to add or select currently installed components to remove.
C Repair	Reinstall all program components installed by the previous setup.
© Remove	Remove all installed components.
Instalionield	
	< Back Next > Cancel

5. Click **Remove**, then click **Next** to remove all components of the previous DTS version.

**Note**: The Add/Remove Programs tool will **not** remove any release patches you have installed for previous DTS versions. After you run the Add/Remove Programs tool to remove previous DTS versions, you must remove these patches by manually deleting the **patches** directory (*oldDTSInstall* \lib\patches).

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# **Starting/Configuring the Apelon DTS Server**

Some server configuration may be required before you to start the Apelon DTS server. Refer to the *Server Configurations* discussions in the *DTS Server Operations Guide*.

# **Creating and Preparing Your Knowledgebase**

A set of tools included with DTS allows you to generate the required knowledgebase tables, populate the tables with desired data, then update and maintain your Knowledgebase moving forward. Procedures for performing these tasks are provided in the *Knowledgebase Administrators Guide*.

If you have existing data in a previous version of DTS you may want to migrate it to the new schema. Refer to the migration information included with the *DTS Release Notes*.

# **Appendix A - DTS Directory Structure and Descriptions**

A complete Apelon DTS installation results in the following directory and file structure on the *Windows* PC.

🖃 🚞 DTS 3.4.1
🖽 🚞 bin
🚞 conf
표 🚞 docs
🚞 icons
표 🚞 java
표 🚞 javadoc
🛅 lib
표 🚞 plugins
🗉 🚞 samples
표 🚞 scripts
🗉 🚞 tomcat

#### bin

The **bin** directory is comprised of files (and the subdirectories in which they reside), required to run DTS. All scripts in the subfolders use **bin** as the working directory.

- *acp.bat* is used by **runApp.bat** to generate the classpath and start the specified program.
- *ajc.bat* is used by **runApp.bat** to generate the call to java to start the specified program with a command window.
- *ajwc.bat* is used by **runApp.bat** to generate the call to java to start the specified program without a command window.
- *drivers.xml* contains information on the JDBC drivers available (Oracle and/or SQL Server).
- *dts.bat* is a startup script that runs the DTS Server using the Java Service Wrapper. The Server runs as a console application (rather than a *Windows* service); run dts.bat to test wrapper functionality. To install the DTS Server as a *Windows* service, run the installsrvc.bat file.
- *import-precedence.txt* contains parameters that define the order in which namespaces will be imported when you run the Subscription Import tool.
- *installsrvc.bat* is a script that installs the DTS Server as a *Windows* service.
- *license.txt* includes a copy of the license that covers use of the Java Service Wrapper.
- *runApp.bat* is a script used to run Apelon products in a *Windows* environment.
- *runApp\_cw.bat* is a script used to run applications from the **Start** menu that may need a Command window; works the same as **runApp.bat**.
- *uninstallsrvc.bat* is a script that uninstalls the DTS Server as a service.
- *wrapper.exe* is the Java Service Wrapper executable file.

The **bin** directory also includes a series of subdirectories, one for each major component of DTS (e.g., Browser, Editor, Server, etc.).



Within these subdirectories are the property files and batch files necessary for running Apelon DTS, scripts for running tests, and the data needed to run the tests.

### bin\admin

The **admin** subdirectory contains files related to DTS Server administration, and the creation and maintenance of DTS users.

- *RemoteAdmin* is the Unix script version of **RemoteAdmin.bat**.
- *RemoteAdmin.bat* allows administrators to connect to the server to check server resources, connections, and to shutdown the server from a remote site.
- UserManager is the Unix script version of UserManager.bat.
- *UserManager.bat* provides the capability to add users for authentication on a secure socket connection to the server. This is the Command Line version of the tool; Apelon recommends that you use the GUI version of the tool, available from the *Windows* **Start** menu (**Start>Apelon>DTSInstall>User Manager**).
- *usermanager.xml* contains the DTS Server connection settings for using the GUI version of the DTS User Manager tool (the Command Line version of the tool does not reference this file).
- *usermanagerlog.xml* contains the parameters to configure logging for the GUI version of the DTS User Manager tool.

#### bin\browser

The **browser** subdirectory contains the *runtomcat.bat* file, which starts or stops a local copy of Apache Tomcat 5.5.16.

#### bin\dtswf

If along with DTS you have installed DTS Workflow, a **dtswf** subdirectory is created in the **bin** directory, and contains the following files.

- *dtswfkbcreate.bat* creates the tables required to use DTS Workflow.
- *dtswfkbcreate.xml* contains database connection parameters used with dtswfkbcreate.bat.

• *dtswfkbcreatelog.xml* contains the configuration parameters by which a log file is generated as a result of DTS Workflow activity.

#### bin\editor

The **editor** subdirectory includes files for configuring the DTS Editor, and for configuring DTS Editor logging.

- *compplugins.bat* creates java class plug-ins that are used with the DTS Editor (e.g., the default code and ID generator class).
- *dtseditor* is the Unix version of **dtseditor.bat**.
- *dtseditor.bat* starts the DTS Editor from the Command Line.
- *dtseditor.xml* contains the parameters for configuring the DTS Editor.
- *dtseditorlog.xml* contains the parameters to configure logging for the DTS Editor.

#### bin\kb

The **kb** subdirectory consists of files and subdirectories related to DTS Knowledgebase connections and content.

🛄 kb	
	admin
÷	content
	create
	load
i	migrate

- *kbcontentlog.xml* contains the configuration parameters by which a log file is generated as a result of a knowledgebase content import or export.
- *kbcontent-ora.xml* contains the data access object for Oracle that is required to run exports and imports.
- *kbcontent-sql2k.xml* contains the data access objects for SQL that are required to run exports and imports.
- *kbcontent-tablelist.xml* lists the tables that are populated with knowledgebase data.
- *kbimportwizard.xml* contains the configuration parameters for the Subscription Import Wizard, which you use to import new subscription content into your knowledgebase.
- *source-connection.xml* is a file, along with *target-connection.xml*, used by all the Knowledgebase utilities so the user only has to specify source and target connections in one of these files.
- *sources.id* contains the names that identify namespace mappings (used in the knowledgebase load and publishing processes).

• *target-connection.xml* is a file, along with *source-connection.xml*, used by all the Knowledgebase utilities so the user only has to specify source and target connections in one of these files. By default, the parameters in these files override those in all the configuration files for each utility program.

#### bin\kb\admin

The admin subdirectory contains files related to the DTS Knowledgebase Admin utility.

- *kbadmin.bat* runs the Knowledgebase Admin utility, which creates synonymous terms, mapping between concepts with similar property values in any two namespaces.
- *kbadmin.xml* contains the parameters to configure the connection against which the Knowledgebase Administration utility will run.
- *kbadminlog.xml* contains the parameters to configure logging for the Knowledgebase Administration utility.
- *kbadmintable.xml* lists the tables that will be populated by the Knowledgebase Admin utility.

#### bin\kb\content\delete

The **content\delete** subdirectory contains files related to deletion of namespaces from the DTS Knowledgebase.

- *kbcontent-delete.bat* deletes one or more subscription namespaces.
- *kbcontent-delete.xml* contains the configuration parameters by which a namespace can be deleted from the DTS Knowledgebase.

#### bin\kb\content\export

The **content\export** subdirectory contains files related to the export of namespace data from the DTS Knowledgebase.

- *export-mappings.bat* exports mappings (associations) between source and target namespaces in Common Data Format (CDF) from the local client namespaces for publication to subscribers.
- *export-mappings.xml* contains the configuration parameters by which **export-mappings.bat** exports inter-source mappings for publication to subscribers.
- *kbcontent-export.bat* exports a namespace from the Master subscription namespace in Common Data Format (CDF) for publication to subscribers.
- *kbcontent-export.xml* contains the configuration parameters by which **kbcontent-export.bat** exports namespaces for publication to subscribers.

#### bin\kb\content\import

The **content\import** subdirectory contains files related to the import of namespace data into the DTS Knowledgebase.

- *import-mappings.bat* imports mappings (associations) in Common Data Format (CDF) between source and target namespaces.
- *import-mappings.xml* contains the configuration parameters by which **import-mappings.bat** imports inter-source mappings.
- *kbcontent-import.bat* imports content from subscription namespaces in Common Data Format (CDF) into a client database.
- *kbcontent-import.xml* contains the configuration parameters by which **kbcontent-import.bat** imports namespaces (sources) into the client database.

#### bin\kb\content\publish

The **content\publish** subdirectory contains files related to the publication of namespace content from the DTS Knowledgebase.

- *kbcontent-publish.bat* allows Apelon clients to publish selected local namespace content for their own subscribers.
- *kbcontent-publish.xml* contains the configuration parameters by which client namespace content is published for subscribers.

#### bin\kb\content\report

The **content\report** subdirectory includes files related to knowledgebase content change reporting.

- *content-change-report.bat* generates the **Content Change Report**, which lists the content of a local namespace that might be affected as a result of your subscription content import (specifically, associations that are linked to concepts are indicated).
- *kbcontent-report.xml* contains the database connection parameters for running the **Content Change Report**. This report lists content in a local namespace that might be affected as a result of your subscription content import (specifically, associations that are linked to concepts are indicated).

#### bin\kb\create

The **kb**\**create** subdirectory includes files related to creation of the DTS Knowledgebase.

• *kbcreate.bat* runs the Knowledgebase Create utility; if this is the first time **kbcreate.bat** is being run, the utility creates all of the tables required to load data into the knowledgebase.

- *kbcreate.xml* contains the parameters by which the schema will be created, and by which a connection will be made to the DTS database. These configurations are required before you can run the Knowledgebase Create utility.
- *kbcreatelog.xml* contains the parameters to configure logging for the Knowledgebase Create utility.

#### bin\kb\load

The **kb**\**load** subdirectory includes files related to migration of TDE data to the DTS Knowledgebase.

- *kbload.bat* runs the Knowledgebase Load utility, which loads data from a TDE namespace into the DTS tables.
- *kbload.xml* contains the parameters for connecting the TDE source and DTS target databases when the Knowledgebase Load utility is run.
- *kbloadlog.xml* contains the parameters to configure logging for the Knowledgebase Load utility.
- *LicenseUtility.bat* Apelon users who import only subscription content from Apelon are not required to run this file. This file must be run if your company, in turn, publishes content to your own subscribers.
- *namespaceStats.bat* retrieves information for namespaces in a given knowledgebase.
- *namespaceStats-config.xml* contains configuration parameters for running a statistics report on one or more namespaces.

#### bin\kb\migrate

The **kb**\**migrate** subdirectory includes files related to the migration of a previous version of the DTS schema to the current version.

- *kbmigrate.bat* runs the schema migration utility, which migrates a previous version of the DTS tables (e.g., 3.2) to the current DTS schema.
- *kbmigrate.xml* contains the connection parameters for the database schema you intend to update when you run **kbmigrate.bat**. Note that you also can modify the <u>target-connection.xml</u> file to set the connection parameters for update of the DTS schema to the current version.
- *kbmigratelog.xml* contains the configuration parameters by which logging is performed when you run the schema migration utility (*kbmigrate.bat*).

### bin\logs

The **logs** directory is empty at point of installation. During the operation of Apelon DTS various log files will be generated and archived in this directory.

#### bin\mc

The **mc** directory includes the file that runs the Modular Classification Deployment Wizard.

• *mcdeploy.bat* runs the DTS Modular Classification Deployment Wizard utility.

#### bin\selext

The **selext** subdirectory contains files that pertain to the Selector & Extractor and MatchPack utilities.

- *filterSpec.dtd* defines the selection and extraction language used.
- *filterSpec.xml* contains the parameters by which knowledgebase data will be acquired to populate generated data **silos** (a silo is a repository of related data, populated with data based on your specifications).
- *selectorlog.xml* contains the parameters to configure logging when the Selector & Extractor is run.
- *selext.bat* starts the Selector & Extractor utility.
- *selextconnection.xml* contains the server connection parameters for running the Selector & Extractor utility.

#### bin\server

The **bin**server subdirectory contains files that pertain to configuring, testing, and starting the DTS Server.

- *ApelonEncrypter.bat* runs the **Apelon Encrypter/Decrypter** tool.
- *apelonserverlog.xml* contains the parameters to configure logging for the servers.
- *apelonserverprops.xml* contains the properties and values to run the Apelon DTS server.
- *mc.properties* contains URLs used by the Ontylog subscription namespace Modular Classifier using the DTS Modular Classification Deployment Wizard.
- *pingtest.bat* runs ping tests based on the configuration parameters in **pingtestconfig.xml**.
- *pingtestconfig.xml* contains the configuration parameters that determine which type of ping tests will be executed.
- *StartApelonServer* is the Unix script version of the *StartApelonServer.bat* file. It starts the server on AIX/Unix.
- *StartApelonServer.bat* executes the command to start the Apelon DTS Server.

#### conf

The **conf** subdirectory contains includes *wrapper.conf*, which is a configuration file used when DTS is run as a service.

#### docs

The **docs** directory contains User Guides and Release Notes specific to the installed version of DTS, each in *.pdf* format. The documents are available from the *Windows* DTS **Start** menu, and can be viewed by any system that includes a copy of the Adobe Acrobat Reader.

The **ReadMe.txt** file that displays during installation also is included.

- The *dtsbrowser.pdf* is the DTS Browser Users Guide in Adobe Acrobat portable document format.
- The *dtsclassification.pdf* is the Ontylog Extension Namespaces and Extension Namespace Classification in DTS document in Adobe Acrobat portable document format.
- The *dtseditor.pdf* is the *DTS Editor Users Guide* in Adobe Acrobat portable document format.
- The *dtseditorplugins.pdf* is the *DTS Editor Plug-ins Guide* in Adobe Acrobat portable document format.
- The *dtsinstall.pdf* is the *DTS Installation Guide* in Adobe Acrobat portable document format.
- The *dtsmatching.pdf* is a copy of the *DTS Matching Quick Overview Guide* in Adobe Acrobat portable document format.
- The *dtsquickstart.pdf* is a copy of the *DTS Quick Start Guide* in Adobe Acrobat portable document format.
- The *dtsreleasenotes.pdf* provides information on changes and enhancements included in the current release.
- The *dtsserver.pdf* is the *DTS Server Operations Guide* in Adobe Acrobat portable document format.
- The *dtssubscriptionimport.pdf* is the *DTS Subscription Vocabulary Content Import Guide* in Adobe Acrobat portable document format.
- The *dtssubsets.pdf* is a copy of the *DTS Subset Editor Guide* in Adobe Acrobat portable document format.
- The *dtswebdeveloper.pdf* is the *DTS Web Developers Guide* in Adobe Acrobat portable document format.

- The *kbadmin.pdf* is the *Knowledgebase Administrators Guide* in Adobe Acrobat portable document format. The guide includes instructions for creating a new DTS schema, migrating data to DTS from previous DTS versions (as well as from other databases), and using the Selector & Extractor utility.
- *The dtsreadme.txt* file highlights enhancements made with each release, as well as configuration and installation requirements.

#### docs\help

The **help** directory contains DTS User Guides in browser format; these documents comprise the online help for the Apelon DTS products. For each document there is a corresponding **files** subdirectory, containing the graphics for each document.

#### icons

The icons directory contains the icon graphics used in the DTS product.

#### java

The **java** and **jre** subdirectories contain JRE version **1.5.0\_11**. This directory and the files within are installed automatically when you install DTS.

#### javadoc

The **javadoc** directories contain the DTS client API documentation and related information. Open **Index.html** to view the HTML documentation.

#### lib

The lib directory contains the JAR files and classes necessary for running Apelon DTS.

#### plugins

The plugins directory contains java class plug-ins that are used with the API (e.g., the default code and ID generator class).

#### samples

The **samples** directory contains a **dtsbrowser** subdirectory, which contains the source code for the DTS Browser. The **editorplugin** subdirectory contains the source code for the DTS Editor plug-ins. The **tutorial** subdirectory contains the source code for the DTS programming tutorial.

The wizard subdirectory contains a copy of the modified Java Wizard Framework code used in development of the **Subscription Wizard** and **Classification Deployment Wizard**, both of which are included in this release. You will find this source in the wizard\src subdirectory; in the wizard root directory you will find a copy of the **GNU Lesser General Public License** that covers use of this code in the **license.txt** file.

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#### scripts

The **Oracle** subdirectory (or **MSSQL** subdirectoy, if that was installed) contains bat and sql files specific to the Oracle (or MSSQL) setup.

bat Files

- add-indexes.bat
- disable-constraints.bat
- drop-indexes.bat
- enable-constraints.bat
- loadContains.bat
- *perf-analyze-tables.bat* (for Oracle installations only)
- *userCreate.bat* (should be run to create the database user)

### sql Files

- add-indexes.sql
- disable-constraints.sql
- drop-indexes.sql
- enable-constraints.sql
- *perf-analyze-tables.sql* (for Oracle installations only)
- setContains.sql
- *userCreate.sql* should be run to create the database user.

### tomcat

Tomcat is servlet container developed by the Apache Software Foundation. It is used in the deployment of the Apelon DTS Browser included with this release. The subdirectories in the **tomcat** directory contain the files that support Tomcat. These directories and files are installed automatically when you install DTS.

Refer to the *DTS Browser Users Guide* and the *DTS Server Operations Guide* for configuration information for Tomcat.

# **Appendix B - Run DTS as a Windows Service**

# Overview

DTS provides the configuration and script files that allow you to run the DTS Server as a *Windows* service. These files comprise a **Java Service Wrapper** foundation (an open source wrapper) that allows Java executables to run as a *Windows* service.

There is no difference in DTS look, feel, or functionality between running DTS as a *Windows* service or running DTS as an executable. Note that running DTS as a *Windows* service is not an option that is available when you install DTS; you must follow the procedures discussed in this section to run DTS as a *Windows* service.

# **Test Java Service Wrapper**

You can test the **Java Service Wrapper** functionality by running **dts.bat** (*DTSInstall* **\bin**) prior to installing and running the actual service install file. This will run the DTS Server using the wrapper as a console application.

- 1. Open up **wrapper.conf** file (*DTSInstall*\**conf**). This file includes configurations for console, service, and log file logging modes when DTS is run as a *Windows* service.
  - wrapper.console.loglevel controls messages sent to the console when running the wrapper using dts.bat.
  - wrapper.syslog.loglevel controls messages written to the NT Event Viewer.
  - wrapper.logfile.loglevel controls messages sent to wrapper.log, a log file written to the bin\logs directory.
- 2. All logging is set to **ERROR** by default (in the absence of any problem errors, this setting will produce **no** output).
- 3. Reset the console.loglevel and logfile.loglevel to **INFO** (wrapper.console.loglevel =INFO and wrapper.logfile.loglevel =INFO). Valid log levels include NONE, FATAL, ERROR, INFO, and DEBUG).
  - **NONE** designates no output.
  - **FATAL** designates very severe error events that likely will cause the application to abort.
  - **ERROR** designates error events that may still allow the application to continue running.

- **INFO** designates all JVM output and informational messages that highlight progress of the application.
- **DEBUG** designates detailed informational events that may be useful for debugging problems you encounter during testing of *Windows* service.
- 4. Save the **wrapper.conf** file settings.
- 5. Run **dts.bat** and view the output written to the console.
- 6. Open the DTS Editor using a socket connection. Refer to the *Connection and Logon* discussions in the *DTS Editor Users Guide* for connection options and procedures.
- 7. On the console, verify that there are no error messages.
- 8. If no errors occurred, reopen the wrapper.conf file, reset the **console.loglevel**, and **logfile.loglevel** to **ERROR**, then save the file settings. Note that it is important that you reset the logging level to **ERROR** to avoid generation of excessive output to the console.

### **Install DTS as a Windows Service**

- 1. If running **dts.bat** produced no errors, run **installsrvc.bat** (*DTSInstall*\bin) to run the DTS Server as a *Windows* service.
- 2. On the console, open up the Services panel; you should see a new service called *Apelon DTSInstall* (where *DTSInstall* is the current DTS verision name and number). Start the service if it isn't started. Service will be set to **Automatic** by default.
- 3. Open the DTS Editor using a socket connection. Refer to the *Connection and Logon* discussions in the *DTS Editor Users Guide* for connection options and procedures.

### **Uninstall DTS as a Windows Service**

If you no longer require DTS to be run as a *Windows* service, run **uninstallsrvc.bat** (*DTSInstall*\**bin**) to uninstall.

# **Appendix C - Installing the Apelon Server on an AIX Machine**

If you are running the Apelon Server on an AIX machine, various files copied to the *Windows* PC during installation must be copied to the AIX machine. On the AIX machine, create the directory *DTSInstall* (where *DTSInstall* is the current DTS verision name and number), then create the subdirectories **bin**, **bin**admin, **binadmin**, **binadmi** 

To the **bin** subdirectory, FTP the following file (**Note**: When you run the FTP process on the contents of the **bin** directory and its subdirectories, ensure that the transfer mode is set to **ascii**).

• drivers.xml

To the **bin**\server subdirectory, FTP the following files:

- apelonserverprops.xml
- apelonserverlog.xml

StartApelonServer

To the **bin**\**admin** subdirectory, FTP the following files:

• RemoteAdmin

UserManager

To the **lib** directory, FTP the following files (Note: When you use FTP to transfer contents to the **lib** subdirectory, you must change the transfer mode to **binary**).

- apelonbeans.jar
- apelonmessage.jar
- apelonserver.jar
- apelonsoap.jar
- common.jar
- dts.jar
- dtscore.jar
- jax-qname.jar
- jaxb-api.jar
- jaxb-impl.jar
- jaxb-libs.jar
- lag4j.jar
- matchpack.jar

- namespace.jar
- relaxngDatatype.jar
- xercesImpl.jar
- xml-apis.jar
- xsdlib.jar
- ojdbc14.jar (if connecting to an Oracle database)
  Sprinta.jar (if connecting to an SQL Server database with a Sprinta driver)
- When connecting to an **SQL Server** database with an **MS** driver, FTP the following files to the **lib** subdirectory
  - o xalan.jar
  - o xpp3-1.1.3.4.c.jar
  - o xtream.jar

For Modular Classifier:

- o classifier.jar
- o dag.jar
- o dtsmc.jar
- o graph.jar

For Selector Extractor:

- o selext.jar
- Before you start the server, it is necessary that you provide execute permissions to **StartApelonServer**, **RemoteAdmin**, and **UserManager**. For example, change to the **bin** directory and enter the following: **chmod** +**x StartApelonServer**.
  - To run DTS applications on Unix (except for the DTS Browser) you must install the version of the Unix JRE that is appropriate for your machine
  - If you install a version of the Unix JRE, you must create the subdirectories **java/jre** (if these directories do not exist)
    - You must then install the Unix JRE in DTS/java/jre in order for batch files to function
    - A bin directory (*DTSInstall/java/jre/bin*) is created when you install the Unix JRE; DTS batch files look for the java executable in *DTSInstall /java/ jre/bin/java.exe*

- Because differences between Unix platforms may exist, Apelon cannot guarantee that scripts included with DTS will run on all Unix platforms. For information on support of other Unix platforms, please contact Apelon <u>Customer Support</u>
- For Oracle database customers who install DTS, Apelon recommends that you implement the Redundant Arrays of Inexpensive Disks, Level 5 (**RAID 5**) controller on the server where the database is located
  - Your DTS search performance may be optimized by implementing **RAID**
  - Refer to the discussions at this link for an overview on using **RAID** with Oracle: <u>http://help.netscape.com/kb/corporate/19970930-3.html</u>

# **Appendix D - Reporting Problems**

Report problems to Apelon by accessing the Apelon e-customer site at

http://support.apelon.com and completing the Support Request Form.

A second option is to send an e-mail message to **support@apelon.com**. Please specify the version of Apelon DTS you are using. It is helpful to include log configuration files, if any. A short example reproducing the problem is very much appreciated.

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