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Product:	**Telescope Enterprise**
Version:	**9.4.0.15 (9.4.0.6961)**
Release Date:	August 3, 2018

Telescope Enterprise: The Most Advanced and Trusted Digital Asset Management System.

Telescope Enterprise is Northplains' scalable enterprise-class digital asset management platform. It enables the secure access, management and distribution of all digital and rich media content in virtually any file format, across any size organization in any industry.

Contents

WHAT'S NEW/FIXED IN THIS TELESCOPE RELEASE?

Highlights

This release provides:

- Completed testing to qualify macOS High Sierra (version 10.13).
- Compliance to EU regulatory requirements for GDPR
- General fixes for the TSAdmin and TSWeb user interfaces
- Improved InDesign-to-PDF conversions using the InDesign Broker
- Enhanced COV relationships for assets with linked art that is not the primary rendition on an asset record

Additionally this release fixes a problem identified with 9.4.0.14 concerning the Doc Info Details window in the "Classic" skin. Please upgrade from 9.4.0.13 directly to 9.4.0.15 if your organization uses the "Classic" skin; if your organization is already on 9.4.0.14 then we recommend immediate deployment of 9.4.0.15.

Details

The following tickets were completed and tested for this release.

Key	Release Note Text	Linked Issues
TS-14606	Improved behavior when using drag and drop to applications via the Asset Dock. COV relationships are now created when FPO (rather than high-resolution) renditions are placed in layout applications such as InDesign and Illustrator. Previously this was only working when high-resolution assets were linked. The Queue Broker is required to support this functionality. This broker updates the doc_renditions table with file_checksum information for the configured FPO rendition, so that links between layouts (INDD, AI, and QXD files) can be defined within the system. For information on installing and configuring Queue Broker, see the Appendix in this document.	
TS-15573	Improved options available for conversion of INDD files to PDF, with the addition of a "PDF Interactive" conversion option that allows for the linked art in the system to be used as part of the conversion process, to enable the production of high-quality PDFs. In order for the conversion to be able to access the placed art to produce a high resolution conversion, the INDD file MUST have been saved with the Telescope InDesign Plug-in prior to import into the system.	
TS-15678	For the Audio and Video I-Pieces, the File Migration Policy(ies) defining the location(s) to be used for generated proxy storage no longer need to be visible to the user importing the assets.	

TS-15712	Improved robustness when TSAdmin users click other tabs after using the Settings tab.	
TS-15714	Added GDPR cookie and privacy statement notification to the application to be compliant with the European Union General Data Protection Regulation (EU GDPR).	
TS-15742	Updated the DBManager scripts such that during the update of a Telescope DB on Oracle, if the ix_ah_by_all_inc_desc index already exists the update will recognize that the index exists, log a warning and continue with the rest of the script to complete the update successfully.	
TS-15779	Improved Doc Info modal behavior so that it displays information in the window where the asset detail view is requested, rather than in the original parent window. Additionally, improvements were made for the "Contained In" container workflow to ensure that pages remain active when drilling down multiple container relationships deep.	
TS-15797	In TSWeb, for the old "Classic" skin, improved robustness when users attempt to open the asset Doc Info Details window. This fixes a problem identified in version 9.4.0.14. Please upgrade from 9.4.0.13 directly to this 9.4.0.15 release if your organization uses the "Classic" skin.	

USER NOTES/LIMITATIONS

End of Third-Party Application Support

The table below summarizes third-party integrations we are not building solutions for, or continuing to fix.

Third-Party Application	Details
Quark Express	Quark 9.5.4.1 is the last version supported (on Telescope 9.4.0.13 / Telescope 9.4.0.6.7).
Telestream FlipFactory	Telestream FlipFactory is no longer purchasable, so can no longer be tested with the Telescope software.
Adobe Creative Suite (CS), Adobe Creative Cloud (CC)	CS 6, CC, and CC 2014 are no longer supported. We continue to support plug-ins for: ● Adobe CC 2018 (InDesign, Illustrator, InDesign Server) ● Adobe CC 2017 (InDesign, Illustrator, InDesign Server) ● Adobe CC 2015 (InDesign, Illustrator, InDesign Server)

User Notes

Key	User Note	Linked Issues
TS-9078	Duplicate values are not allowed in normalized repeating fields. TSWeb users are notified on save if they try to add duplicates.	
TS-13511	Users are encouraged to close the Uploader between actions (Import, Download, Check-in, Attach Rendition, Check-out) to ensure that it continues to respond within the application as expected. It has been noted that if the Uploader is NOT closed that it will on occasion crash or fail to load for the selected action. If this occurs, users should close the Uploader and then refresh their browser window to reload the page.	TS-13773
TS-13817	The folders "Contents\Resources\Sites\default\Resources\Language\en_US" and "Contents\Resources\Sites\classic\Resources\Language\en_US" are empty by	

Key	Limitation	Linked Issues
	default, and can contain customized string files as required by individual customers. These customized string files override the default string files. We have removed warning messages from the TSWeb log that were flagging these empty folders as a potential issue.	
TS-13869	The Telescope Uploader is a separate application that runs independently from the browser window where you are using TSWeb. If you log out of TSWeb, the Telescope Uploader is also closed. However, if you close the TSWeb browser window without logging out of TSWeb first, the Telescope Uploader will not be shut down. In this case, you need to close the Uploader from your OS application taskbar before you log in again to TSWeb. (Otherwise, you may experience unexpected behavior.)	TS-13511, TS-13844
TS-14138	If download jobs are started in rapid succession, the Processes panel will occasionally show unexpected behavior. It is recommended that download jobs be queued with a minimum of 10 seconds between each download. This does not affect multiple assets submitted in a single download job.	TS-13905, TS-14032, TS-14118

Limitations
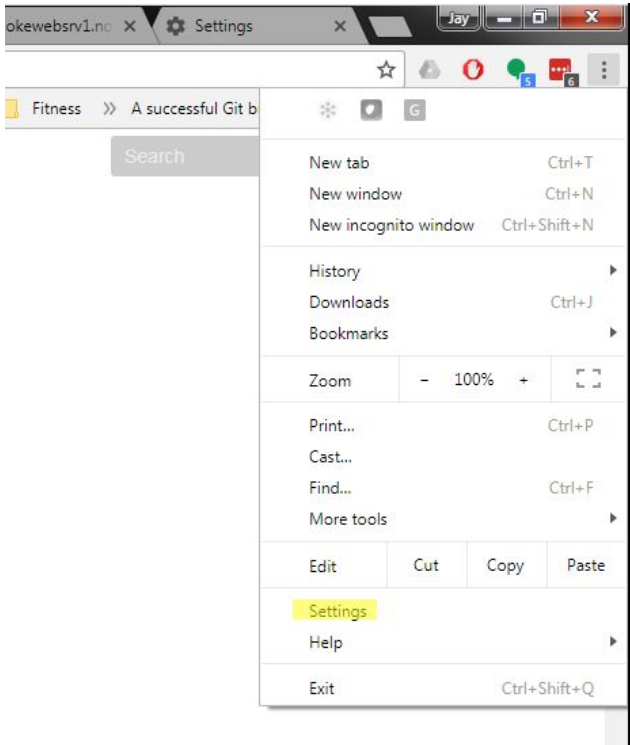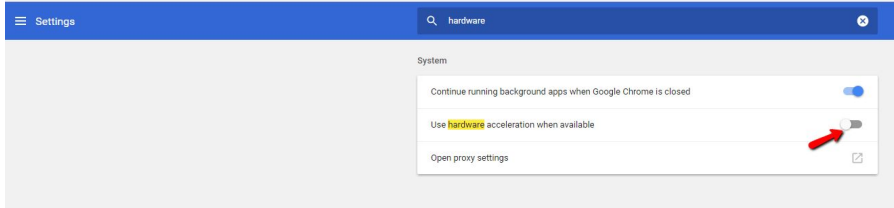
Key	Limitation	Linked Issues
TS-13756	The Processes panel is only updated for downloads and metadata changes, not for any other processes such as uploads, deletes, or other tasks. To view the status of uploads, use the Telescope Uploader.	
TS-13800	When multiple sources are defined for a lookup-enabled metadata field, the multiple source interface is displayed initially, rather than the single source interface--even if the user's preference might be set to one of the configured lookup fields. This causes the interface to display a more limited set of search options for the lookup field. **Workaround:** Users can explicitly select one source using the Sources link and then proceed with their lookup search. The correct lookup dialog is displayed and users are able to filter based on the lookup field and any configured peripheral search fields.	

TS-13849	On Mac OS X systems, the Telescope Uploader metadata panel is cleared (emptied) if the user hits the Backspace key when no input field has focus.	TS-13844
TS-14039	In the "default" skin (previously the new "mktdemo" skin), when TSWeb users have deselected their "Display "Add To Cart" confirmation dialog" preference (in the "My Settings" Download preferences), there is an issue with displaying new assets in the Download Cart. In particular, when the user is in the Doc Info display and adds assets using the "Add to Cart" button, the Download Cart does not auto-refresh. The number in the red circle icon next to the Download Cart tab does not update, and the additional asset(s) do not appear in the Cart even though the information in the system database has been updated. **Workaround:** Users should enable the "Display "Add To Cart" confirmation dialog" preference so that their Download Cart will refresh as expected. Alternatively, they can click on the cart's Refresh icon to refresh manually.	TS-14122
TS-14042	GIF files cannot be processed successfully by the QuickTime I-Piece. The Graphics Broker worker will crash while trying to generate these graphics during both ingest and synchronization. **Workaround:** Remove the GIF and GIFf file types from all connections in the com.northplains.ipiece.QT.xml config file. This file is typically found in the ...\TeleScope\IPieces\config directory on the Telescope hub server. GIF and GIFF file types can be processed by the Image Magick and/or VizView I-Pieces instead.	
TS-14153	We have experienced issues when testing with the Microsoft Edge browser. We recommend using other browsers instead, such as Internet Explorer, Chrome, or Firefox. We are looking to resolve this limitation in a future release.	
TS-14232	We are in the process of testing Microsoft Edge browser for support in future releases. In the course of this testing, we have identified that the Video Manager shuttle control is not working as expected in this browser. We recommend using Internet Explorer (for Windows) when using Video Manager, because this particular browser supports reverse playback. (For Mac OS X, reverse playback is supported by Safari.)	
TS-14233	In Video Manager, when users try to preview an empty playlist, they are not informed that the playlist is empty and not playable. The preview will simply show an all-black preview area with no keyframes or clips.	TS-14048

TS-14448	On Oracle RDMS, occasionally the Refine Search panel in TSWeb does not behave as expected, particularly if a "Not specified" entry is checked. Sometimes the facets will be cleared, or there will be multiple "Not Specified" entries for a given metadata field.	
TS-14622	When transferring files using Aspera for downloads, files (and folders) that are temporarily created in the Aspera transfer location are now deleted after the transfer is complete. For uploads using Aspera, the temporary files are not deleted at this time. To ensure that users are not prevented from importing and/or downloading files because the Aspera Transfer folder has filled its server's hard drive, we recommend administrators create a cron job or Windows task on the server to delete files and folders that are not in use (that is, their file handles are closed) from this folder at set periods of time.	
TS-14722	All downloads will fail if TSWeb users enable "Use Aspera" in their user preferences when the group they belong to is not given the "Enhanced download" permission in TSAdmin. Workaround: Ensure that these users have "Enhanced Download" permission in TSAdmin. Or, advise them to uncheck "Use Aspera" to perform regular downloads.	
TS-14738	We have made changes that require the ip_viraplaylistassetdescriptor field to use a single value as a Playlist identifier in the DB_SETTINGS table. Multiple values were never recommended or suggested in the documentation, but may have been adopted by some installations. (For details on this field, see the Video Manager Manual.)	
TS-14853	After an Approver gives import approval to an asset, the Approver's search results do not update immediately to remove the "Pending Approval" icon from the approved asset. **Workaround:** Complete any search or other action and the next time the asset is a part of a resultset, the "Pending Approval" indicator icon will be cleared.	
TS-14863	For Video Manager, the timeline is not being displayed after video clips are added to the playlist. **Workaround:** Exit the view and go in again; the added asset will then be visible in the timeline.	

TS-14865	Annotation tools are not available when previewing a newly created empty playlist asset. **Workaround:** Open the playlist asset in a new session, or add clips to it so it is not empty.	
TS-14872	For the Video I-Piece, thumbnails are not generated for videos on import if the length of the videos is shorter than the keyframe interval set up in the Video I-Piece configuration (keyframe_gen_interval).	
TS-14889	If a lookup search is performed and there is a large result set (for example, of ISBNs), there is no scroll bar in the Lookup window to see all of the results. **Workaround:** Users should further refine their search criteria using the Peripheral Search items available to get a smaller result set to choose from.	
TS-14894	When performing a change multiple with with functional rules being executed, a -4 return code in the response function causes an exception to be displayed to the user	
TS-14895	The scroll bar in the Processes Panel hides the Show Errors icon, meaning that users cannot access the errors for the processes. **Workaround:** If you need to access the errors, delete completed processes from the Panel until the scroll bar goes away.	
TS-14897	When viewing videos on Windows Firefox 55.0.3 (64-bit), video playback volume and shuttle controls may freeze when users open the same video more than once. (The controls remain visible, but are not responsive.) **Workaround:** Refresh the browser page to use the video controls.	
TS-14898	When a video finishes playing in video playback, the pause icon is still displayed and other controls (such as rewind or the timeline slider) are not usable. **Workaround:** Click on one of the Advance or Reverse Single Frame controls to use the Play button again.	
TS-14899	Container contents are hidden behind controls when large numbers of assets are displayed in a container field. **Workaround:** Click on the "Open Files in Collection" button to see the Container field's content.	
TS- 14909	Moving and deleting video clips within a playlist may work unexpectedly on the following browsers:	

	- On Windows: Firefox, Internet Explorer - On Mac OS X: Firefox **Workaround:** Use Chrome or Safari browsers.	
TS-14942	If video playback for previews does not work in Chrome, disable the Chrome Hardware Acceleration setting, which is enabled by default in Chrome and may prevent the playback of some videos in the HTML5 player. To turn this setting off, go to your Chrome browser and follow these steps: 1. Click on the three vertical dots at the top right of the Chrome window and select Settings. 2. Type "Hardware" in the search box to find the setting that needs to be turned off ("Use Hardware acceleration when available") and turn this setting off. 3. Relaunch the browser with the updated configuration.	

	4. Log in to Telescope and test your video again	
TS-15077	Video will not play ("No video is available") in the old "classic" skin if the db_setting "ip_viravideorendition" is set to "vl_proxies.url" . **Workaround:** Use the new "default" skin, or set the value ip_viravideorendition to a rendition (the default is 2). For details on the "vl_proxies.url" setting, see TS-616 in the 9.4.0.7 release notes.	
TS-15151	Assets without doc_renditions.long_name (metadata only records) entries will not be indexed by the Child Indexing Brokers. Additional SQL statements need to be run. For details, see the appendix, If the Indexing is Incomplete ….	TS-15153
TS-15223	We have identified some limitations when using the Microsoft Edge browser, in particular when dragging and dropping assets from the Asset Dock. Due to browser security limitations beyond our control, users are able to perform this action one time only. Use a different supported browser if you require this feature. To use the Asset Dock on Internet Explorer 11, the Telescope Uploader (which is required by the Asset Dock) needs to be run as a Trusted Site. For details on how to make Telescope Uploader a Trusted Site, download the User Guide (version 9.4.0.6), available on the Portal and refer to the section, "Special Note for Internet Explorer 11" under section 6.2.10 "Install Telescope Uploader on Internet Explorer (Windows)".	TS-15135
TS-15391	If the system is configured to use "Streaming URL" for the "Video Manager Rendition" and the the ip_viravideoassetdescriptor (i.e editorial.asset_type='Video') has been configured to identify VM3 assets, then a metadata change from a non-VM3 asset type (Video Preview-only) to the VM3 asset type (Video) will fail to update the preview type, even though the metadata is changed. This can be corrected by updating manually the VIEWEX.DATA_TYPE of the affected records to ViRa.	TS-14959
TS-15475	The Locate Documents action does not work as expected if more than 100 assets are selected at a time. **Workaround:** Use batches of 100 or less for the Locate Documents action until this issue is resolved.	

INSTALLATION INSTRUCTIONS

Introduction

Important! To ensure that no data is corrupted as part of the process, only upgrade the system when no users are logged onto the system, as part of a maintenance window.

Take a Backup!

Be sure to backup your Telescope installation to another location before proceeding. If you need to reverse your changes, you will need to access your backed up files to patch them back over.

In addition, you will need the backups of your preferences files to make any updates you made. For example, back up the file `com.northplains.dbutils.xml` so you won't lose your changes if you've adjusted the retries or timeouts in that file.

Unzipping the Release File

You will find the release file for this release on the Northplains Portal. Be careful where you unzip the release file:
- **Do not store or unzip this file to a directory whose path includes a space.** For example, do not store it in `C:\My Documents\`.
- Do not change the folder structure of the unzipped files or move any files out of the folder.
- Ensure the folder containing the unzipped files is writable.

File List for this Release

For a complete list of all files changed and added this release, go to the root folder of the unzipped downloaded release file and look for the following file: `_list_of_modified_files.txt`

Additional Notes

- Grey highlighting indicates the values that you need to update
- These instructions assume an installation directory of `C:\Telescope`. Update this path to reflect the actual path used in your environment
- You can apply this release on top of any 9.3.x or 9.4.x release (even the 9.3.0 initial release). All installation files will be overwritten with the latest required files.
- TSWeb users and TSAdmin users should always clear their browser cache before attempting to use a new Telescope release.

Are You Upgrading from 9.3.0? Setting Up a New Telescope Installation?

This release provides a way to upgrade directly from 9.3.0, making it easier to upgrade to the latest version of Telescope. If you are upgrading any version of Telescope before this release (including 9.3.x releases), or perhaps installing a new Telescope installation, follow these steps:

1. If you are installing from scratch, follow the *Installation and Configuration Guide* to Install and configure the Telescope 9.3.0 release. When it is working properly, take a backup.

2. Install this release. (This release can be installed over any release since 9.3.0.)

3. If you are in a distributed environment and need to update components independently, follow the sections below to install this release on all servers. This release includes updated files for all versions after 9.3.0.

4. Upgrade and/or create the database from 9.3.0 through intervening releases to this release using DBManager. (See Upgrade the Database.)

5. Update your configuration files as required. (These files are not overwritten by the new installation, and may need updates for new features.)

Install Hub Server Fixes

> **Important!** If you have installed any Broker (such as the Indexing, Child Indexing, Graphics, or Ingest Brokers) on a separate server machine from the hub server, you will need to install all hub updates manually. Please go to Manual Updates for Hub Brokers.)

If (and **only if**) you are running all Brokers (such as the Indexing, Graphics, and Ingest Brokers) on the same server machine as the hub:

1. Stop all Telescope brokers.
2. Unzip `Telescope_9.4.0.15_9.4.0.6961.zip` to a folder on Telescope Server

3. Run under Administrator privileges:
   `server.bat C:\Telescope`
4. Update the XML version for the "MIMiX.xml" file(s) used in your hot folder configuration to 1.1 from 1.0; it should look like this after it is updated:
   `<?xml version="1.1" encoding="iso-8859-1" standalone="yes"?>`
5. Start all Telescope brokers.

(If any Broker is installed on a separate machine, the BAT file will fail. For further instructions, go to Manual Updates for Brokers.)

Upgrade the Database (Required)
Note: You must upgrade the database if upgrading from 9.4.0.13 to 9.4.0.14.

You can update the Telescope DBMS from the **Upgrade** button in DBManager, which makes database updates for hot fixes as well as major releases. You can run the DBManager upgrade again and again for each hotfix release, as many times as necessary.

1. Go to the Registry Editor (`regedit` from a command line) and remove the registry keys under HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\North Plains Systems\Telescope\Installer\DBManager
This will ensure that the database updates occur from the beginning of 9.4.0, ensuring that all database changes for the latest release are properly applied.

2. Go to the `DBManager` folder, under the installation directory `C:\Telescope\DBManager`

3. Run `DBManager.exe` as Administrator (by right-clicking over the executable and selecting **Run as Administrator** from the menu).
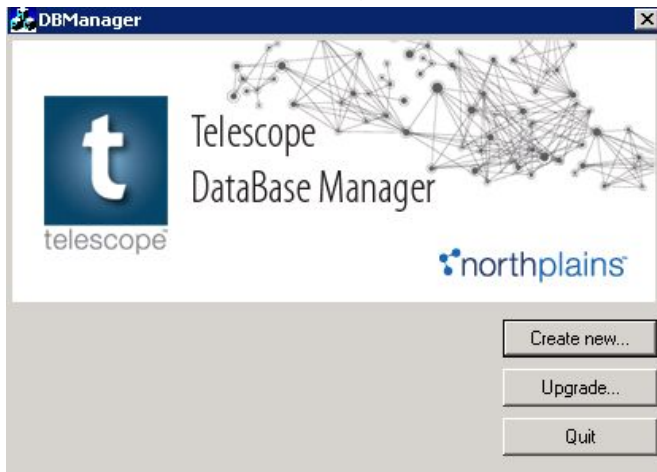
4. Click the **Upgrade** option.

5. Follow the panels to establish the correct database connection. You will be asked to specify the connection name. This is the name of the connection used by the Connection Broker, as shown in TSAdmin when , the Telescope connection name (as shown in TSAdmin when you login as System Administrator). Oracle will also require username and password for the database administration.

   Note: If you do not see your ODBC connection, you may need to add it from the DSN Configuration at C:\WINDOWS\SysWOW64\odbcad32.exe. For details, see the *Installation Guide*.

6. **Important!** After the process completes, click **Save** to save the logs. Specify a unique file name to ensure you can find the logs for the particular date and database connection. These logs are important, and are required by Customer Support to help you should there be issues.

7. You will need to repeat this process for all active database connections.

Run the Script Install on the Web Server

1. Ensure all Telescope application instances are stopped.

2. Unzip `Telescope_9.4.0.15_9.4.0.6961.zip` to a folder of your choice on the Telescope Web server.

3. Open the Command Prompt as Administrator.
   (To run as administrator, right-click over the Command Prompt option in the Start menu and choose "Run as administrator.")

4. Change directory (cd) to the folder where you unzipped the patch release.

5. Issue the following command:

   ```
   websrv.bat C:\inetpub\wwwroot
   ```

6. After you run the batch file on both the web application and the web server, find the TSWeb configuration file. The default location is:
   ```
   C:\Telescope\Applications\TSWeb.woa\Contents\Resources\Config.plist
   ```

   Back up the file and change the parameter `TelescopeUploaderVersion` value to "94.0.6961":
   ```
   TelescopeUploaderVersion="94.0.6961";
   ```

7. Start all Telescope applications.

Run the Script Install on the Web Application Server

1. Ensure all Telescope application instances are stopped.
2. Unzip `Telescope_9.4.0.14_9.4.0.6961.zip` to a folder on the Telescope Web Application server.
3. Open the Command Prompt as Administrator.

   (To run as administrator, right-click over the Command Prompt option in the Start menu and choose "Run as administrator.")

4. Change directory (`cd`) to the folder where you unzipped the patch release.
5. Issue the following command:

   ```
   webapp.bat [patch to WebApp folder like C:\Telescope]
   ```

6. Reindex the Solr database (For details, see the *Telescope Administrator's Reference Manual*; look for the section "To reindex for Solr search".)
7. Start all Telescope applications.
8. Log into TSAdmin and navigate to the Settings tab. Verify that the Video Rendition Settings (namely, Video Manager Rendition and Regular Preview Rendition) are both set to your playback proxy rendition (or are configured to your specific requirements). Typically, your installation will have the same value set for both.

ADDITIONAL CONFIGURATION

This section lists additional configuration you need to do after installing (as applicable) the patches for the web server, web application server, database, and all of the brokers. (For details, see the previous section, Installation Instructions.)

The release requiring this configuration is listed in the title of each of the sections below.

Queue Broker (9.4.0.15)

The Queue Broker is required to support functionality to differentiate between file renditions (see TS-14606). For information on installing and configuring this broker, see the Appendix in this document, Appendix: Install the Queue Broker.

Instructions for Customers with Order Fulfillment (9.4.0.15)

1. Copy the file `..\licenses\tsweb\OrderLicense.key` from the release package to the following location on the Web Application server:
   `C:\Telescope\Applications\TSWeb.woa\Contents\Resources`
2. Copy the file `..\licenses\tsadmin\OrderLicense.key` from the release package to the following location on the Web Application server:
   `C:\Telescope\Applications\TSAdmin.woa\Contents\Resources`

MassStore Broker (9.4.0.14)

MassStore Broker is for customers who have integrated their Telescope with MassStore. Find the MassStore Broker files separately on the Portal (look for the file, Telescope 9.4.0.14 (6838) MassStore Broker.zip

Back up these files where they reside in your Telescope installation, replace them with the new files, and restart the MassStore Broker service.

Transformation Platform 1.6 (9.4.0.13)

This release requires Transformation Platform 1.6. For instructions on how to download and configure this version, go to the release notes on the Portal:
https://portal.northplains.com/files/asset/item7239/

Aspera Updates (9.4.0.12)

To protect Aspera configuration, the Aspera properties files for TSWeb and DLManager are no longer overwritten during the patch install process. Instead, administrators can manually update their Aspera configuration files with any changes in the same way as is currently done with I-Pieces:

1. Find the updated Aspera configuration files in the release folder in the following locations:
   `configuration_files\applications\DLManager.woa\Contents\Resources\aspera.prop`
   `configuration_files\applications\TSWeb.woa\Contents\Resources\aspera.prop`

2. Back up the following files and then use a compare tool to compare these files with the files in your installations and merge your configuration into the updated files.

```
C:\Telescope\Applications\DLManager.woa\Contents\Resources\aspera.prop
C:\Telescope\Applications\TSWeb.woa\Contents\Resources\aspera.prop
```

(If you have no Aspera customizations, simply overwrite these files in your installation.)

3. Restart the TSWeb and DLManager applications.

Adobe Creative Cloud 2018 Upgrades (9.4.0.8)

Adobe Creative Cloud (CC) 2018 add-ons (plug-ins) were introduced in 9.4.0.8. Refer to the Telescope 9.4.0.8 release notes for information on:
- How to find the client plug-ins in the Adobe Exchange Add-ons site
- How to install the client plug-ins directly via the zxp file
- How to deploy the Telescope InDesign Server 2018 plug-in

Implement Search on Single Default Search Field (9.4.0.8)

To improve Solr search performance, we implemented an option to search within the Single Default Search field in Solr, rather than through all searchable fields. Refer to the Telescope 9.4.0.8 release notes for information on this option.

Multi-part Message Support for Telescope Uploader (9.4.0.7)

Communication protocols were improved this release to support multi-part messages from TSWeb to the Telescope Uploader. This change was requested because Telescope Uploader uses URL requests that are longer than the typical limits imposed by browsers (which could be as small as 2k bytes). To enable this feature, see the appendix in this document, Appendix: Enable Multi-part Messages for the Telescope Uploader.

Update the I-Piece and C-Piece Configuration (9.4.0.7)

The "configuration_files" file folder in the Telescope 9.4.0.7 patch contains default configuration files (XML, XSD, INF and REG) for I-Pieces and C-Pieces, with their default installation file structure.

If any I-Piece or C-Piece does not work as expected after this upgrade, use these default files as a reference for updating your environment. You will need to customize these files to work for your own environment, so it is recommended to compare them with your current configuration files and merge any updates as required. For details, particularly on how to update the configuration for the Video and Audio I-Pieces, see the release notes for the Telescope 9.4.0.7 release.

Deploy Creative Cloud 2017 Plug-ins (9.4.0.6)

The Telescope 9.4.0.6 release notes contain instructions to deploy plug-ins for Creative Cloud 2017.

Note on QuickLinks (9.4.0.5)

If you use QuickLinks and are upgrading from before Telescope 9.4.0.5, see the section, "Supplemental instructions for implementing QuickLinks" in the Telescope 9.4.0.5 Release Notes.

MANUAL UPDATES FOR BROKERS

If you have any Broker installed on a different machine from the Hub server, you will need to manually update all Hub Brokers by copying (patching) new files over top of existing files. The sections below provide details on how to do this. (Tables appear alphabetically by Broker, and for each broker are in reverse chronological order based on release date when last updated.)

Important! Backups are essential. If you have not backed up the entire Telescope installation, ensure that you backup specific files before overwriting them.

Note: These instructions assume an installation directory of `C:\Telescope`. Update this path to reflect the actual path used in your environment

Upgrading from 9.4.0.14?

If you are upgrading from the previous 9.4.0.14 release, you only need to make updates to the following Brokers:

- DBManager
- Graphics Broker
- Ingest Broker
- Queue Broker

(*) All of these brokers require an update of the utils.jar file. For those listed above marked with an asterisk (*), utils.jar is the only file update required.

Follow the sections below only for these brokers. For your convenience, for each broker there is a column showing the most recent update; you only need to apply those files that have changed specifically from 9.4.0.8 to 9.4.0.9.

Note: For a complete list of all files changed and added this release, go to the root folder of the unzipped downloaded release file and look for for the following file: `_list_of_modified_files.txt`

Connection Broker Updates (9.3.x only)

1. Stop the Connection Broker.
2. Back up the files listed below. (Copy them to a different location, or back up your entire Telescope installation.)
3. Copy these files from the released version and replace the files in your installation.
4. Start the Connection Broker.

The following list shows files that have been updated for the Connection Broker from the 9.3.0 release.

Path	File name	Most recent update
`C:\Telescope\`	`ConnectionBroker.jar` `ConnectionPool.jar`	9.3.3.0

DBManager Updates

1. Stop all Telescope brokers.
2. Back up the files listed below. (Copy them to a different location, or back up your entire Telescope installation.)
3. Unzip DBManager.zip to a folder on Telescope Server, where DBManager is installed.
4. Copy the released version of the folder into your Telescope installation folder, replacing the old folder

The following list shows files that have been updated for DBManager since the 9.3.0 release.

Path	File name	Most recent update
`C:\Telescope\DBManager\`	`DBManager.exe`	**9.4.0.15**

`C:\Telescope\DBManager\files\extras\mssql`	`addxmpdocid.sql`
	`audittables.sql`
	`createfks.sql`
	`createindexes.sql`
	`createmetadatafield.sql`
	`createpks.sql`
	`errorlog.sql`
	`event_model.sql`
	`inserttexttrack.sql`
	`interopbrkr.sql`
	`jsonfeatures.sql`
	`langlocale.sql`
	`ootbbase.sql`
	`queue_broker.sql`
	`renameindex.sql`
	`solr92upgrade.sql`
	`tablelist934.sql`
	`upgdbversion.sql`
	`upglinkprocs.sql`
	`upgsavesearches.sql`
	`upgtemplates.sql`
		9.4.0.15

`C:\Telescope\DBManager\files\extras\oracle`	`addxmpdocid.sql`
	`audittables.sql`
	`createaudittriggers.sql`
	`inserttexttrack.sql`
	`langlocale.sql`
	`newcreateaudittriggers.sql`
	`newerror_log.sql`
	`newinteropbrkr.sql`
	`newjsonfeatures.sql`
	`newlanglocale.sql`
	`newqueue_broker.sql`
		9.4.0.15

	new_createmetadatafield.sql new_event_model.sql ootbbase.sql solr92upgrade.sql upgcreatefks.sql upgdbversion.sql upgeditselxn.sql upgembddmeta.sql upgerror_log.sql upginteropbrkr.sql upgjsonfeatures.sql upglinkprocs.sql upgqueue_broker.sql upgsavesearches.sql upgtemplates.sql upg_createmetadatafield.sql upg_event_model.sql	
C:\Telescope\DBManager\files\hotfix\mssql	9.4.0_9.4.0.sql 9.4.0_9.4.0.xml	**9.4.0.15**
C:\Telescope\DBManager\files\hotfix\oracle	9.4.0_9.4.0.sql 9.4.0_9.4.0.xml	**9.4.0.15**
C:\Telescope\DBManager\files\icons	AI.gif AIFF.gif AVI.gif BMP.gif CSS.gif default.gif DNG.gif DOC.gif EPS.gif EPUB.gif FLA.gif FLV.gif GIF.gif HTM.gif INDD.gif JPG.gif KEY.gif MOV.gif MP3.gif MPEG.gif PDF.gif PLST.gif PNG.gif PPT.gif PS.gif SCITEX.gif SIT.gif SWF.gif TIFF.gif TXT.gif WAV.gif	**9.4.0.15**

	`WMV.gif`
	`XDOC.gif`
	`XLS.gif`
	`ZIP.gif`	

`C:\Telescope\DBManager\files\new\mssql`	`9.4.sql` `9.4.xml`	**9.4.0.15**
`C:\Telescope\DBManager\files\new\oracle`	`9.4.sql` `9.4.xml`	**9.4.0.15**

`C:\Telescope\DBManager\files\patches\mssql`	`9.1.1_9.4.0.sql`
	`9.1.1_9.4.0.xml`
	`9.1.2_9.4.0.sql`
	`9.1.2_9.4.0.xml`
	`9.1.3_9.4.0.sql`
	`9.1.3_9.4.0.xml`
	`9.1.4_9.4.0.sql`
	`9.1.4_9.4.0.xml`
	`9.2.0_9.4.0.sql`
	`9.2.0_9.4.0.xml`
	`9.3.0_9.4.0.sql`
	`9.3.1_9.4.0.sql`
	`9.3.2_9.4.0.sql`
	`9.3.3_9.4.0.sql`
	`9.3.4_9.4.0.sql`
		9.4.0.15

`C:\Telescope\DBManager\files\patches\oracle`	`9.1.1_9.4.0.sql`
	`9.1.1_9.4.0.xml`
	`9.1.2_9.4.0.sql`
	`9.1.2_9.4.0.xml`
	`9.1.3_9.4.0.sql`
	`9.1.3_9.4.0.xml`
	`9.1.4_9.4.0.sql`
	`9.1.4_9.4.0.xml`
	`9.2.0_9.4.0.sql`
	`9.2.0_9.4.0.xml`
	`9.3.0_9.4.0.sql`
	`9.3.1_9.4.0.sql`
	`9.3.2_9.4.0.sql`
	`9.3.3_9.4.0.sql`
	`9.3.4_9.4.0.sql`
		9.4.0.15

`C:\Telescope\DBManager\files\upgrade\mssql`	`8.4_8.5.sql` `8.4_8.5.xml`	**9.4.0.15**

| | ```
8.5_9.4.sql
8.5_9.4.xml
9.0_9.4.sql
9.0_9.4.xml
``` | |
| `C:\Telescope\DBManager\files\upgrade\oracle` | ```
8.4_9.4.sql
8.4_9.4.xml
8.5_9.4.sql
8.5_9.4.xml
9.0_9.4.sql
9.0_9.4.xml
``` | **9.4.0.15** |
| `C:\Telescope\DBManager\files\utils\mssql` | ```
customcolupdate.sql
dbiptcsetup.sql
dbxmpsetup.sql
digimarcfuncrule.sql
funcrulesetup.sql
newprimarykeys.sql
parsefileinfo.sql
Track Admin Changes by User
ID - revert.sql
Track Admin Changes by User
ID.sql
UpdateSQL.sql
``` | **9.4.0.15** |
| `C:\Telescope\DBManager\files\utils\oracle` | ```
createaudittriggers.sql
customsqlupd.sql
dbxmpsetup.sql
parsefileinfo.sql
``` | **9.4.0.15** |
| `C:\Telescope\tools\DBManager\Xerces\` | `xerces-c_2_8_VC10.dll` | **9.4.0.15** |

Distribution Broker Updates

1. Stop the Distribution Broker.
2. Back up the files listed below. (Copy them to a different location, or back up your entire Telescope installation.)
3. Copy these files from the released version and replace the files in your installation.
4. Start the Distribution Broker.

The following list shows files that have been updated for the Distribution Broker from the 9.3.0 release (in chronological order).

Path	File name	Most recent update
`C:\Telescope\`	`utils.jar`	9.4.0.9

`C:\Telescope\DPieces\`	`com.northplains.dpiece.ApplyFMPolicy.jar`
	`com.northplains.dpiece.ApplyFMPolicy.xml`
	`com.northplains.dpiece.MigrateNAttachRendition.jar`
	`com.northplains.dpiece.MigrateNAttachRendition.xml`
	`com.northplains.dpiece.SendToFTP.jar`
	`com.northplains.dpiece.SendToFTP.xml`
	`com.northplains.dpiece.SendToLocal.jar`
	`com.northplains.dpiece.SendToLocal.xml`
		9.4.0.7

`C:\Telescope\`	`DistributionBroker.jar`	9.3.1.0

Graphics Broker Updates

1. Stop the NTFS File Broker and Graphics Broker.
2. Back up the files listed below. (Copy them to a different location, or back up your entire Telescope installation.)
3. Copy these files from the released version and replace the files in your installation.
4. Start the NTFS File Broker and Graphics Broker.

The following list shows files that have been updated for the Graphics Broker from the 9.3.0 release.

Path (on the Graphics Broker)	File name	Most recent update
`C:\Telescope\`	`GraphicsBrokerProxy.jar`	9.4.0.15
`C:\Telescope\CPieces\`	`Indesign CPiece.dll`	9.4.0.15

`C:\Telescope\IPieces\`	`AudioIPiece.dll`
	`QuarkXPress IPiece.dll`
	`VideoIPiece.dll`
		9.4.0.13

`C:\Telescope\`	`gb.exe`	9.4.0.10
`C:\Telescope\IPieces\`	`XML IPiece.dll`	9.4.0.10

`C:\Telescope\`	`gb.exe`
	`GBWorker.exe`
	`utils.jar`
		9.4.0.9

`C:\Telescope\IPieces\`	`AudioIPiece.dll` `VideoIPiece.dll`	9.4.0.7

`C:\Telescope\`	`Serializers.dll`
	`TPBridge.dll`
	`TPConnector.Xml`
	`TPConnector.dll`
		9.4.0.6

`C:\Telescope\IPieces\`	`Flash IPiece.dll` `QT IPiece.dll`	9.4.0.6

`C:\Telescope\IPieces\`	`Aspose IPiece.dll`
	`AVI IPiece.dll`
	`Digimarc IPiece.dll`
	`Digital Photography IPiece.dll`
	`Document IPiece.dll`
	`EQMediaRichCORE IPiece.dll`
	`FileInfo IPiece.dll`
	`FLIPFACTORY IPiece.dll`
	`Illustrator COV IPiece.dll`
	`ImageMagick IPiece.dll`
	`InDesign IPiece.dll`
	`Metadata IPiece.dll`
	`News IPiece.dll`
	`PostScript IPiece.dll`
	`QuarkXPress IPiece.dll`
	`VizViewIPiece.dll`
	`XMP IPiece.dll`
		9.4.0.5

`C:\Telescope\IPieces\config\`	`com.northplains.ipiece.video.xml` `com.northplains.ipiece.video.xsd`	**9.4.0.5**
`C:\Telescope\`	`imagetox.exe`	**9.3.4.2**

`C:\Telescope\`	`Aspose.Pdf.lic`
	`Aspose.Slides.lic`
	`Aspose.Words.lic`
		9.3.4.0

`C:\Program Files (x86)\` `Xinet\FullPress\`	`imagetox.exe`	**9.3.4.0**
`C:\Telescope\CPieces\`	`Digimarc CPiece.dll`	**9.3.1.0**
`C:\Telescope\CPieces\Digimarc\`	`PNG (Portable Network Graphics ).inf` `TIFF (Tag Image File Format).inf`	**9.3.1.0**

The following list shows files related to the Graphics Broker that have been updated on the Telescope Hub server, for releases since the 9.4.0 release (no changes were made in 9.3.x).

Path (on the Telescope Hub server)	File name	Most recent update

`C:\Telescope\server\IPieces\`	`AudioIPiece.dll`
	`com.northplains.ipiece.audio.xml`
	`com.northplains.ipiece.audio.xsd`
		9.4.0.5

`C:\Telescope\server\IPieces\config\`	`com.northplains.ipiece.audio.xml`	**9.4.0.5**

`C:\Telescope\server\IPieces\`	`News IPiece.dll`
	`PostScript IPiece.dll`
	`QT IPiece.dll`
	`QuarkXPress IPiece.dll`
	`VizViewIPiece.dll`
	`XMP IPiece.dll`
	`FLIPFACTORY IPiece.dll`
		9.4.0.3

`C:\Telescope\server\`	`Aspose.Pdf.lic`
	`Aspose.Slides.lic`
	`Aspose.Words.lic`
		9.4.0.2

InDesign Broker Updates

1. Stop the InDesign Broker Broker.
2. Back up the files listed below. (Copy them to a different location, or back up your entire Telescope installation.)
3. Copy these files from the released version and replace the files in your installation.
4. If you use InDesign Server and are updating from before Telescope 9.4.0.5, see the section "Update the InDesign Server Plug-In" in the 9.4.0.5 release notes for details on how to update this plugin.
5. Start the InDesign Broker.

Note: The "configuration_files" file folder for this release contains default configuration files (INF and CMD) for the InDesign C-Pieces, with their default installation file structure. If these C-Pieces do not work as expected after this upgrade, use these default files as a reference for updating your environment. You will need to customize these files to work for your own environment, so it is recommended to compare them with your current configuration files and merge any updates as required.

The following list shows files that have been updated for the InDesign Broker from the 9.4.0 release (no changes were made in 9.3.x).

Path	File name	Most recent update
`C:\Telescope\`	`IndesignBroker.exe`	**9.4.0.14**
`C:\Telescope\NPSPlugins\InDesign\MAC_CC\`	`Telescope.IDCC_2014_mac.zxp`	**9.4.0.4**

Indexing and Child Indexing Brokers Updates

1. Stop the Child Indexing Brokers and Indexing Broker.
2. Back up the files listed below. (Copy them to a different location, or back up your entire Telescope installation.)
3. Copy these files from the released version and replace the files in your installation.
4. Start the Indexing Broker and the Child Indexing Brokers.

The following list shows all the files that have been updated for the Child Indexing and Indexing Brokers from the 9.3.0 release.

Path	File name	Most recent update
C:\Telescope\	search.jar	9.4.0.10
C:\Telescope\	DBProcedures.jar index.jar utils.jar	9.4.0.9
C:\Telescope\	ChildIndexingBroker.jar com.northplains.dbutils.xml * ***** If you have made changes to this file (for example, to adjust the retries or timeouts), you will need to copy over your changes from the backed up file. com.northplains.dbutils.xsd	9.4.0.6
C:\Telescope\	smimix.jar	9.4.0.5
C:\Telescope\	dbutils.properties tsp.jar	9.3.4.8

Ingest Broker Updates

1. Stop the Ingest Broker.
2. Back up the files listed below. (Copy them to a different location, or back up your entire Telescope installation.)
3. Copy these files from the released version and replace the files in your installation.
4. Update the XML version for the "MIMiX.xml" file(s) used in your hot folder configuration to 1.1 from 1.0; it should look like this after it is updated:

   ```
   <?xml version="1.1" encoding="iso-8859-1" standalone="yes"?>
   ```
5. Start the Ingest Broker

The following list shows files that have been updated for the Ingest Broker from the 9.4.0 release (no changes were made in 9.3.x).

Path	File name	Most recent update
C:\Telescope\	GraphicsBrokerProxy.jar ib.exe IngestBroker.jar IngestBrokerProxy.jar	9.4.0.15
C:\Telescope\	DBProcedures.jar	9.4.0.8
C:\Telescope\	IBClient.jar utils.jar	9.4.0.7
C:\Telescope\	GBClient.jar	9.4.0.6
C:\Telescope\IPieces\	Aspose IPiece.dll	9.3.4.5

Interoperability Broker Updates

1. Stop the NPS Interoperability Broker.
2. Back up the files listed below. (Copy them to a different location, or back up your entire Telescope installation.)
3. Copy these files from the released version and replace the files in your installation.
4. Start the NPS Interoperability Broker.

The following list shows files that have been updated for the NPS Interoperability Broker from the 9.4.0 release (no changes were made in 9.3.x).

Path	File name	Most recent update
C:\Telescope\	InteropBroker.jar	9.4.0.11
C:\Telescope\	DBProcedures.jar utils.jar	9.4.0.9
C:\Telescope\	IBClient.jar iob.exe rest.jar	9.4.0.7

C:\Telescope\IOPieces\	XFolder.jar	9.4.0.7

MassStore Broker Updates

MassStore Broker is for customers who have integrated their Telescope environment with the Masstech MassStore engine.

To update this Broker:

1. Stop the NPS MassStore Broker.
2. Back up the files listed below. (Copy them to a different location, or back up your entire Telescope installation.)
3. Copy these files from the released version and replace the files in your installation.
4. Start the MassStore Broker.

The following list shows files that have been updated for the NPS MassStore Broker from the 9.4.0 release.

Path	File name	Most recent update
C:\Telescope\MassStore\lib	MassStoreBroker.jar	9.4.0.14
C:\Telescope\	mimixapi.jar	9.4.0.10

NTFS File Broker Updates

1. Stop the NTFS File Broker and the Graphics Broker.
2. Back up the files listed below. (Copy them to a different location, or back up your entire Telescope installation.)
3. Copy these files from the released version and replace the files in your installation.
4. Start the NTFS File Broker and the Graphics Broker.

The following list shows files that have been updated for the NTFS File Broker from the 9.3.0 release.

Path	File name	Most recent update
C:\Telescope\	utils.jar	9.4.0.9

`C:\Telescope\CPieces\`	`VideoPlaylistCPiece.dll`	**9.4.0.8**

`C:\Telescope\`	`FBConverter.exe`
	`NTFS File Broker.exe`
	`Serializers.dll`
	`TPBridge.dll`
	`TPConnector.Xml`
	`TPConnector.dll`
		9.4.0.7

`C:\Telescope\CPieces\`	`AudioCPiece.dll`
	`Indesign CPiece.dll`
	`VideoCPiece.dll`
	`VizViewCPiece.dll`
	`XMP CPiece.dll`
		9.4.0.7

`C:\Telescope\CPieces\`
`InDesign\`
	`EPS (Adobe Encapsulated PostScript File).cmd`
	`EPS (Adobe Encapsulated PostScript File).inf`
	`IDML(Adobe InDesign Markup Language).cmd`
	`IDML(Adobe InDesign Markup Language).inf`
	`JPEG (Adobe Joint Photographics Experts Group).cmd`
	`JPEG (Adobe Joint Photographics Experts Group).inf`
	`PDF (Adobe Portable Document Format).cmd`
	`PDF (Adobe Portable Document Format).inf`
	`XML (Adobe XML).cmd`
	`XML (Adobe XML).inf`
	`cpiece.dtd`
		9.4.0.7

`C:\Telescope\CPieces\`	`Digital Photography CPiece.dll`
	`Digimarc CPiece.dll`
	`EQMediaRichCORE CPiece.dll`
	`FF CPiece.dll`
	`FFPlaylist CPiece.dll`
	`ImageMagick CPiece.dll`
	`Indesign CPiece.dll`
	`Playlist CPiece.dll`
	`PPC CPiece.dll`
	`VizViewCPiece.dll`
	`XML CPiece.dll`
	`XMP CPiece.dll`
		9.4.0.5

`C:\Telescope\CPieces\`
`ImageMagick\`
	`BMP (Bitmap file).inf`
	`GIFF (Graphics Interchange Format).inf`
	`PNG (Portable Network Graphics ).inf`
	`PSD (Adobe Photoshop).inf`
	`TIFF (Tag Image File Format).inf`
		9.4.0.5

`C:\Telescope\CPieces\`
`VideoCPiece\`
	`config_dir.reg`
	`cpiece.dtd`
	`MOOV (QuickTime by Transformation Platform).inf`
	`MP4 (MP4 by Transformation Platform).inf`
	`MPEG (MPEG2 by Transformation Platform).inf`
	`WMV (Windows Media by Transformation Platform).inf`
		9.4.0.5

`C:\Telescope\CPieces\`
`VideoPlaylistCPiece\`
	`COMM(Stitching - Transformation Platform).inf`
	`MOOV (QuickTime by Transformation Platform).inf`
	`config_dir.reg`
	`cpiece.dtd`
	`MP4 (MP4 by Transformation Platform).inf`
	`MPEG (MPEG2 by Transformation Platform).inf`
	`WMV (Windows Media by Transformation Platform).inf`
		9.4.0.5

`C:\Telescope\`	`Aspose.Pdf.lic`
	`Aspose.Slides.lic`
	`Aspose.Words.lic`
		9.3.4.0

`C:\Telescope\CPieces\`	`ImageMagick CPiece.dll`	9.3.4.0

`C:\Telescope\CPieces\`
`VizViewCPiece\`
	`BMP (VizView Bitmap File).inf`
	`CMYK.icc`
	`cpiece.dtd`
	`EPSF (VizView Encapsulated PostScript Format).inf`
	`JPEG (VizView Joint Photographics Experts Group).inf`
	`PNG (VizView Portable Network Graphics ).inf`
	`sRGB.icm`
	`TIFF (VizView Tag Image File Format).inf`
		9.3.4.0

`C:\Program Files` `(x86)\Xinet\FullPress\`	`imagetox.exe`	9.3.4.0

Queue Broker (9.4.0.15)

Installation instructions for the Queue Broker are available in the Appendix, Appendix: Install/Update the Queue Broker.

1. Stop the Queue Broker.
2. Back up the files listed below. (Copy them to a different location, or back up your entire Telescope installation.)
3. Copy these files from the released version and replace the files in your installation.
4. Start the Queue Broker.

The following list shows files that have been updated for the Queue Broker from the 9.4.0.6.1 release.

Path	File name	Most recent update
`C:\Telescope\`	`QueueBroker.jar`	9.4.0.15

`C:\Telescope\Tasks\MD5\oracle`	`NPS_XiNet_trig.sql`
	
	`tsp_update_md5.sql`
		9.4.0.15

Session Broker Updates (from 9.3.x)

5. Stop the Session Broker.
6. Back up the files listed below. (Copy them to a different location, or back up your entire Telescope installation.)
7. Copy these files from the released version and replace the files in your installation.
8. Start the Session Broker.

The following list shows files that have been updated for the Session Broker from the 9.3.0 release.

Path	File name	Most recent update
`C:\Telescope\`	`sesb.exe`	9.3.3.0

Zoom Broker and Zoom Builder Updates (from 9.3.x)

1. Stop the Zoom Builder and Zoom Broker.

2. Back up the files listed below. (Copy them to a different location, or back up your entire Telescope installation.)
3. Copy these files from the released version and replace the files in your installation.
4. Start the Stop the Zoom Builder and Zoom Broker.

The following list shows files that have been updated for the Zoom Builder and Zoom Broker from the 9.3.0 release.

Path	File name	Most recent update
C:\Telescope\	zb.exe ZBroker.exe ZoomBuilder.exe	9.3.3.0
C:\Telescope\	ZBWorker.exe Zoom Broker.exe	9.3.1.0

APPENDIX: INSTALL/UPDATE THE QUEUE BROKER

Installing the Queue Broker involves copying the files to the Telescope base directory, creating the registry entries (qb.reg may have been supplied). The required database tables have already been added with the 9.4.0.6.1 release.

To install the Queue Broker:

1. Unzip the zipped Queue Broker package, `Telescope_QueueBroker_9.4.0.15-9.4.0.6961.zip`.
2. The following files should have been provided in the zip file, it is recommended that they be installed in the Telescope installation folder; for example D:\Apps\TeleScope.
   - `QueueBroker.jar` - the java code
   - `qb.exe` - wrapper
   - `qbwrapper.xml` - wrapper configuration
   - `config\qb.reg` - registry entries for the Queue Broker
3. Edit the `qb.reg` file for the environment, in particular the HUBIP, CONNECTION, and the entries in the CLASSPATH. Then run the file. See the section below for details on the registry key settings.
4. Install the service by running the full path to the qb executable with the `i` (install) option. For example:

   ```
   D:\Apps\Telescope\QB\qb.exe -i
   ```

5. Ensure the two tables, qb_queue and qb_processes, are already in your Telescope DBMS. (They should have been installed with the 9.4.0.6.1 release.)

   If you are running an Oracle RDBMS, use the scripts provided in `Tasks\MD5\oracle` from your DB tool of choice to update the `NPS_XiNet_trig` script on ACCESS_HISTORY

6. Execute the registry file `qb.reg` to populate the values `under HKLM\Software\Wow6432Node\North Plains Systems\Queue Broker` if not already present.
7. Start the service.
8. Inspect the log file for errors.
9. Test the installation by populating the tables with a test process and entering a queue entry for the ping test operation. For example, (remember to replace CONNECTION with the correct connection name):

For SQL Server:
```
INSERT INTO QB_PROCESSES (process, type, name, location, param, payload_location, active)
values ('ping test', 'java', 'pingDB', 'com.northplains.QueueBroker.QBroker', 'String',
'cmd', 1);
INSERT INTO QB_QUEUE values (1,'Active','ping test', 'CONNECTION', NULL, GETDATE());
```

For Oracle:
```
INSERT INTO QB_PROCESSES (process, type, name, location, param, payload_location, active)
VALUES ('ping test', 'java', 'pingDB', 'com.northplains.QueueBroker.QBroker', 'String',
'cmd', 1);
```

Northplains

```
         INSERT INTO QB_QUEUE VALUES (1, 'Active', 'ping test', 'CONNECTION', NULL, SYSDATE);
```

After a minute the row should show a status of "Success" and the logs will show details.

10. Examine the log and the qb_queue table for success. It should report the current version of Telescope.
11. Insert rows for setup of the additional processes needed for MD5 generation for the FPO volume, these statements are for both SQL Server and Oracle:

```
INSERT INTO QB_PROCESSES (process_name, process_type, name, location, process_parameter,
input_location, payload_location, active, process_output, broker_id)
  VALUES ('GBTMD5', 'shell', 'D:\Apps\Telescope\Tasks\MD5\gbt.bat',
'D:\Apps\Telescope\GBTest\', 'D:\Apps\Telescope\Temp\script{id}.txt
D:\Apps\Telescope\Temp\{replace2}.txt', NULL, 'D:\Apps\Telescope\Temp\script{id}.txt', 1,
'D:\Apps\Telescope\Temp\gbt.log', '1');


INSERT INTO QB_PROCESSES (process_name, process_type, name, location, process_parameter,
input_location, payload_location, active, process_output, broker_id)
VALUES ('GBTsqlMD5', 'sql', 'tsp_update_md5', NULL, 'Int Int String',
'D:\Apps\Telescope\Temp\{replace2}.txt', NULL, 1,
'D:\Apps\Telescope\Temp\sqllog{replace2}.txt', '1');
```

To Remove the Queue Broker

To remove the Queue Broker follow the steps below:

1. Stop the Queue Broker Process
2. Run the uninstall command to the wrapper with the full path. For example,
   `D:\Apps\Telescope\qb.exe –u`
3. Run regedit and remove the `HKLM\Software\Wow6432Node\North Plains Systems\Queue Broker` registry entries
4. Delete the following files:
   - `qb.exe`
   - `QueueBroker.jar`
   - `config\com.northplains.broker.queue.xml`
   - `config\com.northplains.broker.queue.xsd`
5. Drop the tables qb_queue and qb_processes from Database.

Queue Broker Registry Keys

When the Queue Broker is installed, a new key is created for it in the Windows registry:

[HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\North Plains Systems\QueueBroker\CurrentVersion]

The registry key defines values that affect the execution of the Queue Broker, as summarized in the following table.

NOTE: Registry keys are only read at computer startup. If you change them, you need to reboot the machine.

Key	Description	Default Value
CLASSPATH	The Java JVM class path setting. This setting must include the full path to the libraries required by the JVM, including the following jar files: QueueBroker.jar, jtds-1.2.5.jar, SessionBrokerProxy.jar, SESBClient.jar, ConnectionPool.jar, odbc5.jar, plus any additional jar files to be used in java requests	
HUBIP	The IP, hostname, or fully qualified domain name of the Telescope Hub server.	
HUBPORT	The port number of the Telescope Hub server. Typically 12345.	
JVM_HEAP_SIZE	Each Java application has a default heap size. If a particular application uses a lot of memory, the heap size, specified in megabytes, can be changed via this variable. For example, if you want a heap size of 512 megabytes, then type "512M" (without the quotes).	Recommended maximum setting is 1024M.
LOGFILE	The path to Queue Broker log file.	Default is *<install directory>*\logs\qb.log.
LOGLEVEL	The level of message logging in the log file. Valid values are: "LOG_DEBUG" (very verbose, use only for short time spans), "LOG_INFO", "LOG_NOTICE", "LOG_WARNING", "LOG_ERR", and "LOG_CRIT" (critical errors only).	If omitted, the default is LOG_NOTICE.
IIOP_HOST	Queue Broker's Host Name (or IP). If not set, it uses the local IP. If you want to use a fully-qualified name for the IIOP_HOST registry key (rather than an IP address), instructions are provided under the "Firewall Configuration" section in the *Telescope Installation and Configuration Guide for Windows Server Edition*.	
IIOP_PORT	Message Broker's listening port. If omitted, Graphics Brokers use the system assigned port.	

CONNECTION	The name (as defined in cb_data) for the default database for the Queue Broker to connect to.	
LICENSE	The type of licensing used - "USER" to use a content creator license - "BROKER" to use the Queue Broker license	
BROKER_ID	The identifier for the Queue broker if multiple brokers are needed to run against the same database.	
THREADS	The maximum number of threads that will run at the same time.	
PREFSML_FILE	The file name and path to the Queue Broker's PrefsML file.	Default value is: <install directory>\com.northplains.broker.queue.xml.

APPENDIX: SOLR INDEXING INFORMATION

If you find that the documented method for reindexing the Solr database (using *true:true* for the reindex parameter in the Indexing Broker PrefsML file) is slow or incomplete, consider using the following alternatives.

If the Indexing is Incomplete ....

Assets without doc_renditions.long_name entries (metadata only records) will not be indexed by the Child Indexing Brokers. The following additional SQL statements need to be run to add these entries to the Solr search database. These statements will add these records to the Solr queue with a status of "-2", meaning that the Child Indexing Brokers will go ahead and index them.

For SQL Server:

```
INSERT INTO SEARCH_INDEX_ACTIONS (record_id, status, index_time, user_name) SELECT record_id,
-2, GETDATE(), 'admin' FROM EDITORIAL WHERE record_id NOT IN (SELECT DISTINCT(record_id) FROM
DOC_RENDITIONS);
```

For Oracle:

```
INSERT INTO SEARCH_INDEX_ACTIONS (record_id, status, index_time, user_name) SELECT record_id,
-2, SYSDATE, 'admin' FROM EDITORIAL WHERE record_id NOT IN (SELECT DISTINCT(record_id) FROM
DOC_RENDITIONS);
```

Alternative Procedure for Re-Indexing

If the reindex of the Solr database does not complete properly when you use *true:true* for the reindex parameter in the Indexing Broker PrefsML file, then we recommend the following alternative procedure to re-index the Solr database, using the search_index_actions table. Using the re-index parameter in the Indexing Broker's PrefsML file uses a different process than this one, which uses the search_index_actions table, as outlined in the steps below.

Note that this alternative procedure seems to be faster and provide better results than the *true:true* method. We are validating whether this alternative should become the recommended method for re-indexing.

To re-index using the search_index_actions table:

1. Stop the Telescope Web instances. This is to avoid any confusion to users while indexing is occurring.
2. Set the reindex parameter in the Indexing Broker PrefsML file (com.northplains.IndexingBroker.xml) to false:false (from true:true) to avoid a re-index.
3. Ensure that the following DB_SETTINGS entries for re-indexing are set to max(record_id): lastSearchBatchIndexRecord and lastSearchIndexRecord.
4. Go to the Solr Server:
   a. Open the Solr console http://localhost:8983/solr/

b. From the drop down on the left, select the core to delete. (For example, recs, rec2, etc.)

c. Look for the "data" directory, as highlighted below (it ends with "\data"). Take note of this location. For example:

```
CWD:          C:\TeleScope\Solr\solr-4.10.3\telescope
Instance:     C:\TeleScope\Solr\solr-4.10.3\telescope\multicore3\core0
Data:         C:\TeleScope\Solr\solr-4.10.3\telescope\multicore3\core0\data
Index:        C:\TeleScope\Solr\solr-4.10.3\telescope\multicore3\core0\data\index
```

5. On the Telescope Hub, stop the NPS Indexing Broker service.
6. On the Telescope Hub, stop the Child Indexing Broker services.
7. Stop the Child Indexing Broker services on any remote servers.
8. On the Solr Server, stop the NPS Jetty service - this will stop Solr on the server.
9. Using Windows Explorer, navigate to the "data" directory you took note of above.
10. Delete the contents of the data directory, including all of its sub-directories. They will be re-created as empty when Solr is restarted.
11. Start the NPS Jetty Service to restart Solr.
12. Start the NPS Indexing Broker service on the Telescope Hub.
13. Start any relevant Child Indexing Broker Services.
14. Go to the Telescope Database for the MSSQL Management Studio or Oracle SQL Developer.
15. Execute the following SQL to insert all record_id's from the editorial table into the search_index_actions table.
    For MS SQL:

```
INSERT INTO SEARCH_INDEX_ACTIONS (record_id, status, index_time, user_name)
        SELECT record_id, -2, GETDATE(), 'admin' FROM EDITORIAL;
```

    For Oracle:

```
INSERT INTO SEARCH_INDEX_ACTIONS (record_id, status, index_time, user_name)
        (SELECT record_id, -2, SYSDATE, 'admin' FROM EDITORIAL);
```

    These statements will add these records to the Solr queue with a status of "-2", meaning that the Child Indexing Brokers will go ahead and index them.

16. Indexing will start automatically.
17. Monitor the progress of the indexing. The Solr console can be used to monitor the progress.
    http://localhost:8983/solr/#/<selected core> i.e. recs
18. Once indexing is complete (that is, the Child Indexing Brokers are no longer processing records), review the search_engine_actions table. Any records remaining in the table are not indexed, and may have -1 as the status. These remaining records can be corrected and re-processed by changing the -1 status to -2.

APPENDIX: ENABLE MULTI-PART MESSAGES FOR THE TELESCOPE UPLOADER

Communication protocols are available to support multi-part messages from TSWeb to the Telescope Uploader, up to 99 parts. This change may be necessary for some installations when Telescope Uploader uses URL requests that are longer than the typical limits imposed by browsers (which could be as small as 2k bytes).

To enable this feature, add the following new parameters to the TSWeb `config.plist` file at `TeleScope\Applications\tsweb.woa\Contents\Resources\Config.plist`

```
IsSocketEnable = "true";
SocketPort = "6164";
SocketChunkSize = "500";
```

`IsSocketEnable` must be set to "true" to enable this feature. The other parameters can be left as is with their default values.

Avoid Browser Security Alerts

Due to limitations on communications between the browser and other applications some additional steps need to be followed on client systems to allow for the implemented fix to work as expected.

TSWeb users can take the following steps to configure their browsers so that they will not see a security alert with this feature. Steps are shown for each browser on each operating system.
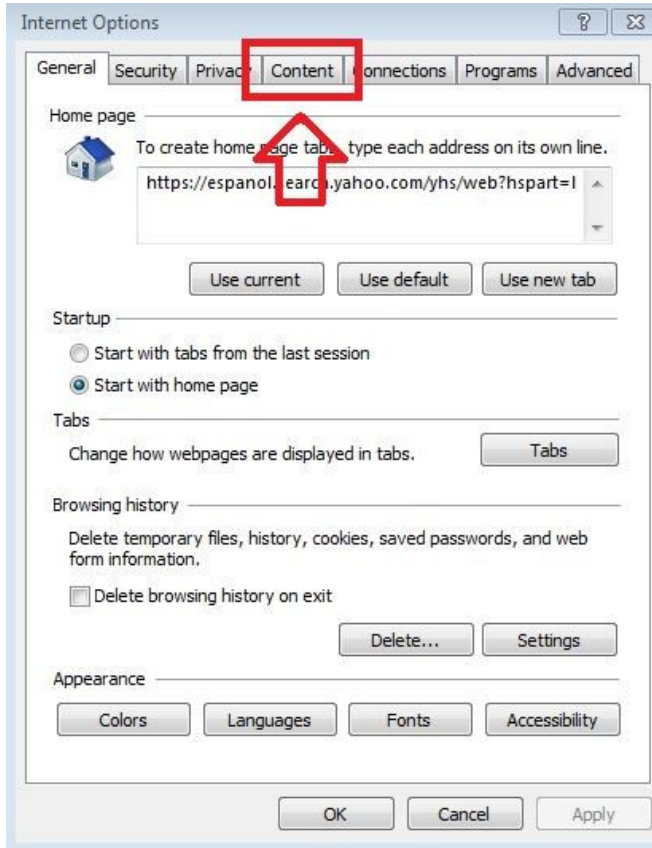
Chrome (for Windows and Mac OS X)

You need to use the Chrome command to allow an insecure localhost. These steps apply to both Windows and Mac OS X.

1. Copy and run the following command in the Chrome URL field:
   `chrome://flags/#allow-insecure-localhost.`
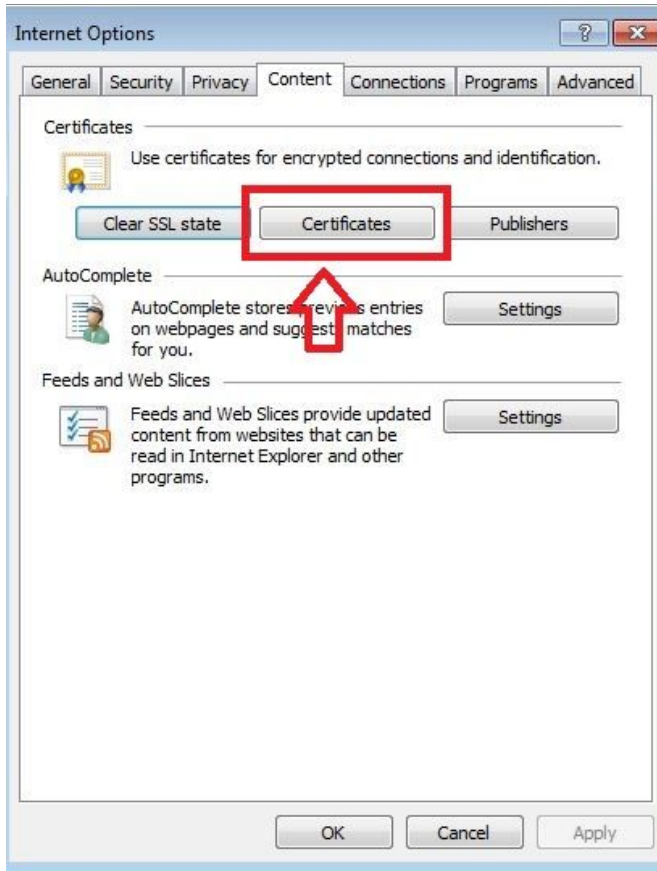2. Click the Enable link.
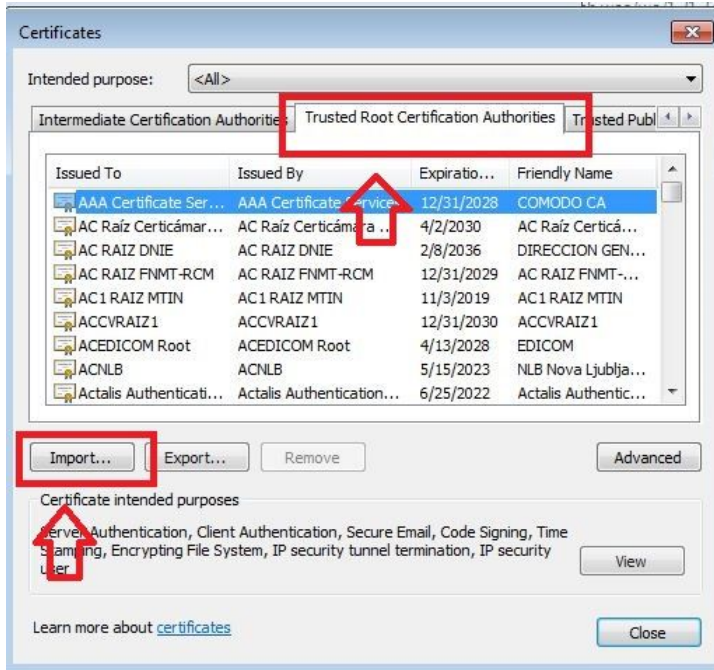
Internet Explorer (on Windows)
1. Open Internet Options and click on the Content tab.

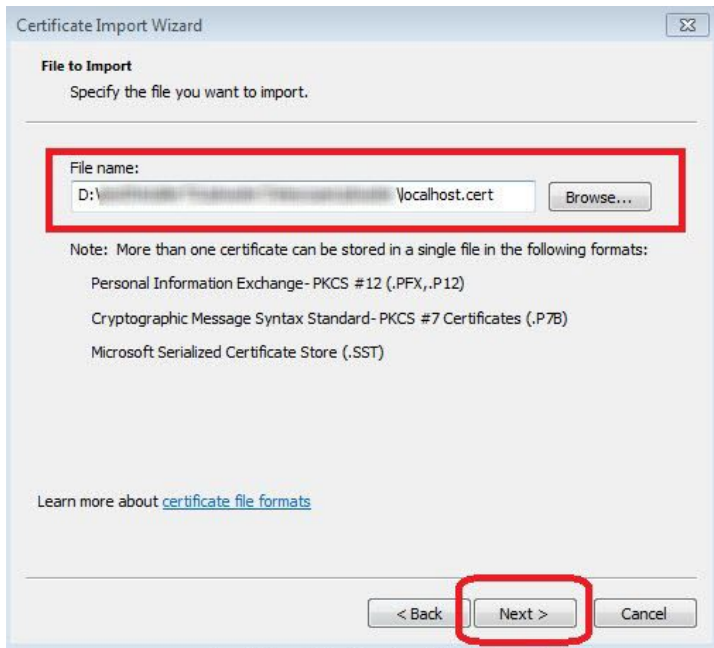2. In the Content window, select the **Certificates** button.

3. In the Certificates windows, select the "Trusted Root Certification Authorities" tab and click on the Import button:
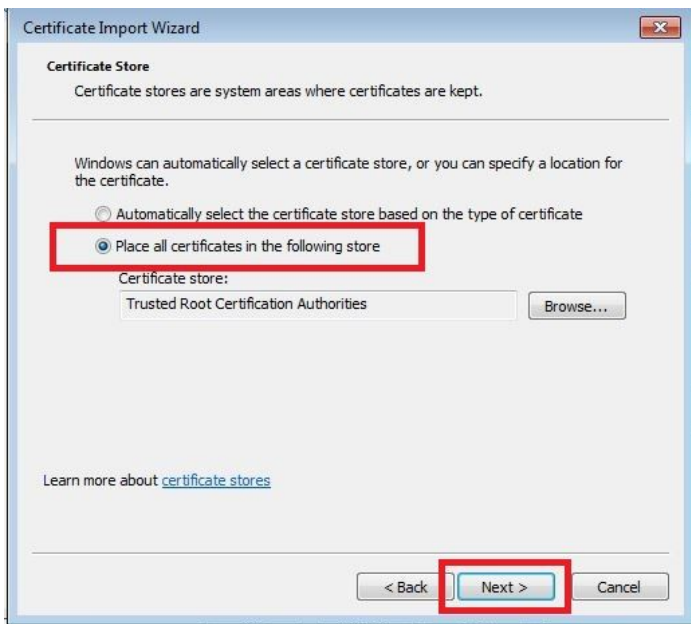

4. In the Certificate Import Wizard window browse for and select the localhost.cert file that is in the TSUploader install path, then click the **Next** button.
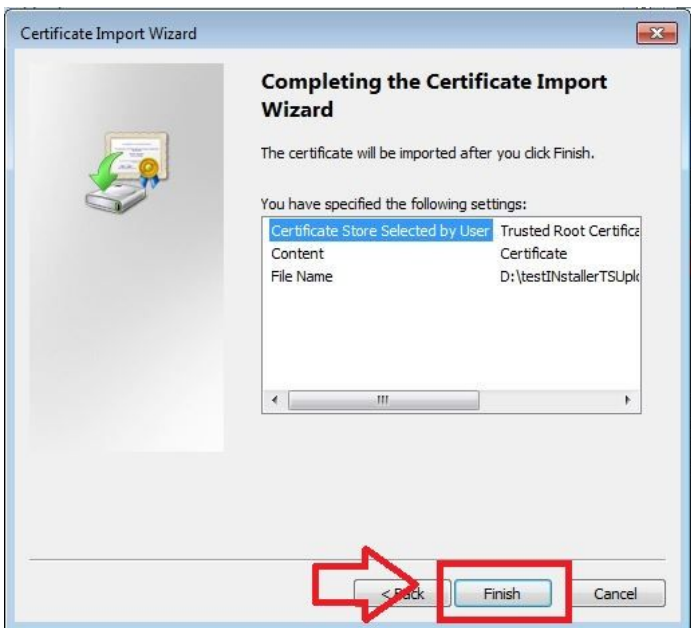For example:
D:\Users\MyUserName\AppData\Roaming\North Plains Systems\TSUploader-940\TelescopeUploader

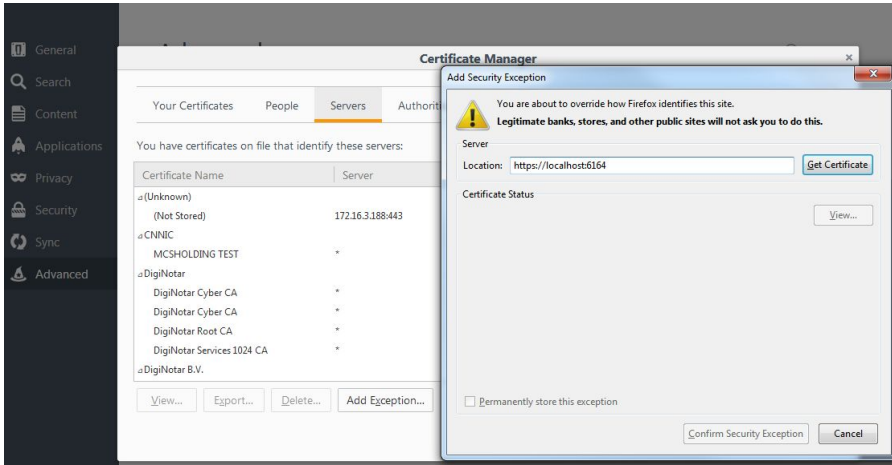5. In the Certificate Store panel, click the **Next** button.

6. In the Completing the Certificate panel, click the **Finish** button.

Firefox for Windows

1. Follow this path from the Firefox menu:

   Firefox menu -> Options -> Advanced -> Certificates -> View Certificates -> Servers -> Add Exception.

2. Add the following exception (for example):

   ```
   https: /localhost:6164
   ```

(where "6164" is the port number that set in as the SocketPort parameter in the TSWeb `config.plist` file.)

3. Click Get Certificate.

Firefox and Safari (on Macintosh)

1. Navigate to the following file:
   `/Applications/Telescope Uploader 940/ Contents/MacOS/localhost.cert`
2. Double-click on the localhost.cert file. The certificate is automatically added to the keychain. You will see the Keychain window confirming this.