

AD SWAT

CA DevTest  
10.1



# Upgrade DevTest from 8.5 to 10.1

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Daniel Mazzei  
Date: May 2017

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# Chapter 1: Introduction

## Purpose

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This procedure assumes an *in-place upgrade* (i.e., installing to the *same* directory as the existing installation).

While the upgrade process itself is fairly straightforward and may only take a few hours, we recommend [consulting CA Technical Support](#) and allocating at least 2-3 days for the upgrade itself and any configuration changes that need to be made or issues that may arise.

## Document Tracking

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Version	Date	Author	Version
9.1.0.399 GA	03.09.2016	Koustubh Warty	Version 2.0
10.1.0.283 GA	04.25.2017	Daniel Mazzei	Version 3.0

## Reporting Issues

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Please send your questions/comments/concerns on this document to [Koustubh.Warty@ca.com](mailto:Koustubh.Warty@ca.com) and [Daniel.Mazzei@ca.com](mailto:Daniel.Mazzei@ca.com)

# Chapter 2: Before You Begin

## Documentation

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There are many resources available to answer questions you may have about the upgrade process or specific configuration settings. We highly suggest you visit the [DevTest Upgrade Center](#) and review the information provided before performing the upgrade.

You can also find information about the upgrade process, including pre-requisites and post-installation checks, in the [Upgrading DevTest](#) section of the [DevTest Solutions 10.1 documentation](#). Be sure to [verify all system requirements](#) (including operating system and database versions supported) to make sure you have the recommended memory and storage capacity.

A list of the New Features and Enhancements, Resolved Issues, Known Issues, End of Service and End of Life announcements, and much other information, can be found in the [DevTest 10.1 Release Notes](#).

## Prerequisites

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Gather all the required license keys, installation files, and environment information prior to beginning the upgrade, including:

- **Installation files:** [Follow the instructions in the documentation](#) to download the installation files for a supported operating system.
- **Environment information:** A list of hostnames, IP addresses, usernames, passwords, databases, etc. must be accessible during the upgrade. Be sure to collect database login information, LDAP configuration settings, SSL certificates, etc. as well or have someone who can provide this information on standby before starting the upgrade.
- **License keys:** Make sure you have a valid license key file. The file-based license is valid for one year from the date of issue and will be renewed automatically if your support contract is up-to-date. The license file is sent to an email address associated with the license for your company. If you are not sure who is getting it, [contact CA Technical Support](#) to request a new license key. For more information about licensing, see [Licensing](#).

**NOTE: Always back up existing projects, properties files, etc. (recommended even if you are using a versioning system)!**

# Chapter 3: Pre-Installation Checklist

## Backup Data

This is a mandatory step that needs to be done prior to proceeding with the upgrade. We will be doing an in-place upgrade which necessitates to back up the following to a remote location -

- The entire existing DevTest 8.5 folder

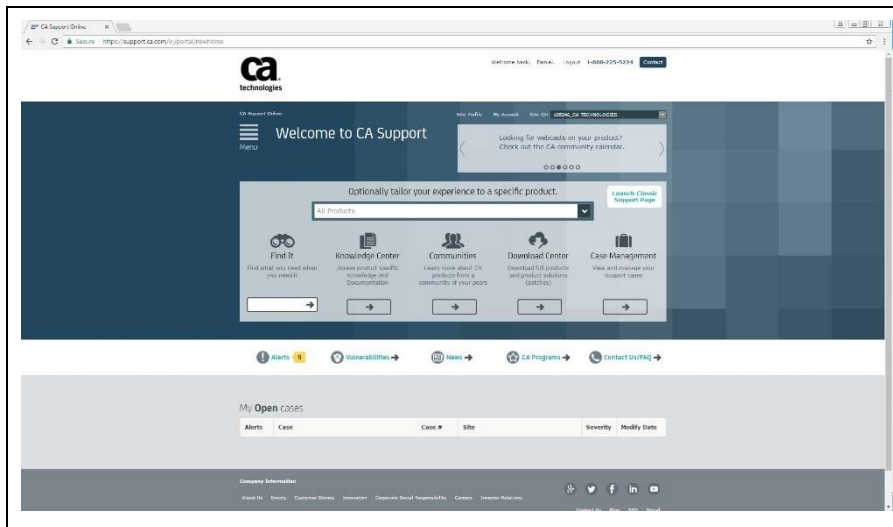
This would take care of the following which are important files in your installation

- Properties files (local, site, lisa)
- Virtual Services (if stored locally)
- Application Test tests (if stored locally)
- HotDeploy folder
- vseDeploy folder
- lib
- any custom folders

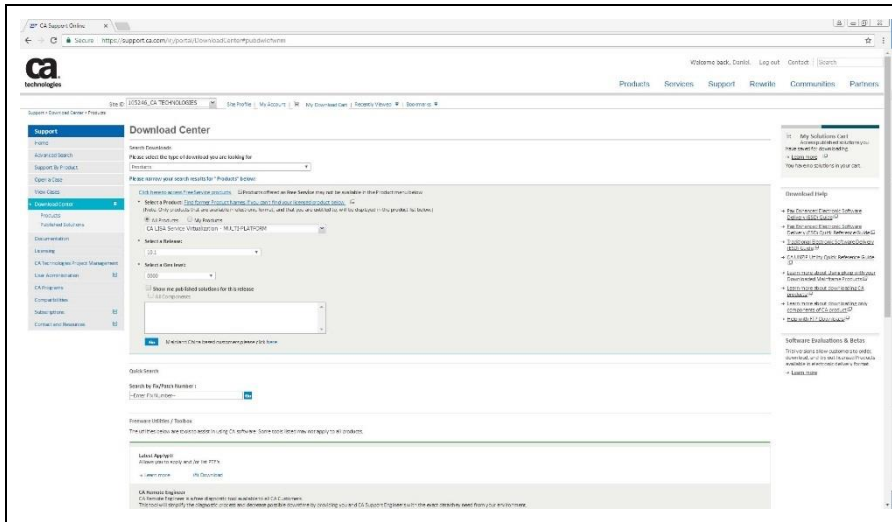
If you have stored your existing Tests and Virtual Services in a Source Control Repository, then the recommendation is to make a copy of those assets. Once that copy is created, you can use the new copy with DevTest 10.1. In this case, if there are any issues, then you would have a backup to fall back on if required.

**NOTE: All the above files and folders are preserved during the upgrade from the previous release and should be untouched. The backup is precautionary if there was to be an unforeseen issue during the in-place upgrade.**

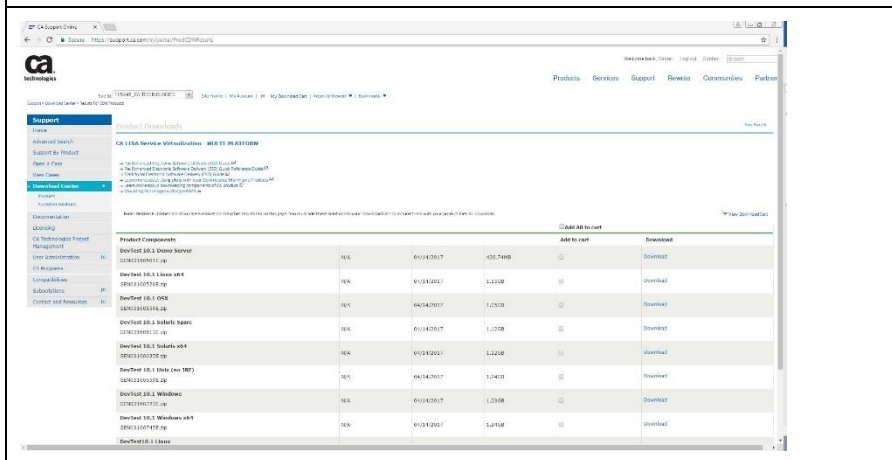
## Download DevTest



DevTest 10.1 can be downloaded from the CA Support site at <http://support.ca.com>



Select Download Center → Download Products. Search for "CA Service Virtualization" and select release "10.1"

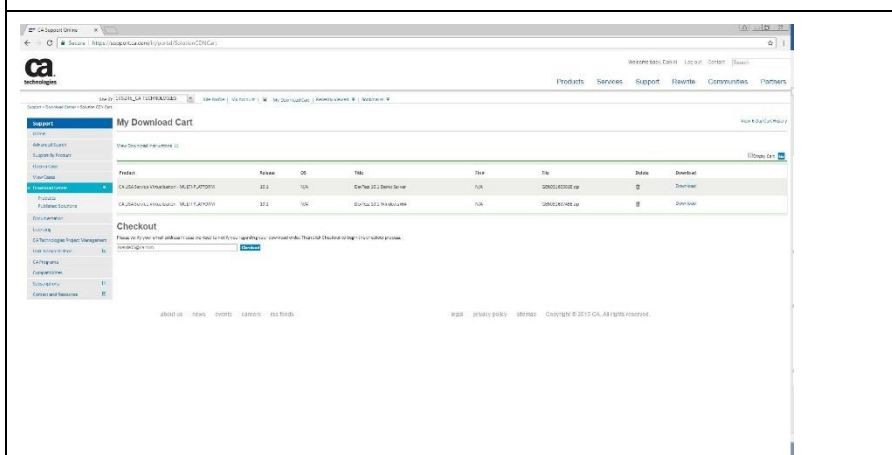


Depending on your permissions, you should see the above. If you are not able to view similar to above, please contact your account manager.

Once you select Go, you will see a list of the installers for various operating systems as well as the zip for the DevTestDemoServer as shown below

There is a single installer per platform

The installer starts with prefix 'DevTest' so the installer for Windows 64 Bit will be called 'DevTest\_win\_x64.exe'.



You can either select Download from here directly or select Add to Cart for the various downloads (as required) and then select View Download Cart.

NOTE: Be sure to download the 64-bit (x64) version if using a 64-bit operating system. Also, download the Demo Server application separately if you plan on following the training or tutorials.

Name	Date modified	Type	Size
devtest_win_x64.exe	4/14/2017 8:33 AM	Application	1,299,561 KB
DevTestDemoServer.zip	4/14/2017 8:30 AM	Compressed (zipp...	430,838 KB
GEN03160501E.zip	4/25/2017 11:26 AM	Compressed (zipp...	430,838 KB
GEN03160745E.zip	4/25/2017 11:28 AM	Compressed (zipp...	1,295,712 KB

Extract both ZIP files and you will see the respective folders for the DevTest installer and Demo Server.

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# Chapter 4: Installation

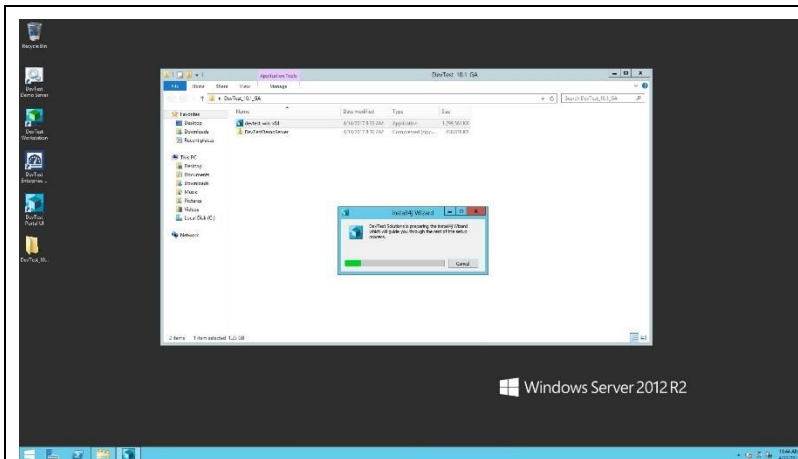
## Shutdown DevTest Windows Services

If you have any DevTest UI's or Workstation currently open then this would be a good time to close all those. Also if the DemoServer is running shut it down before the following steps.

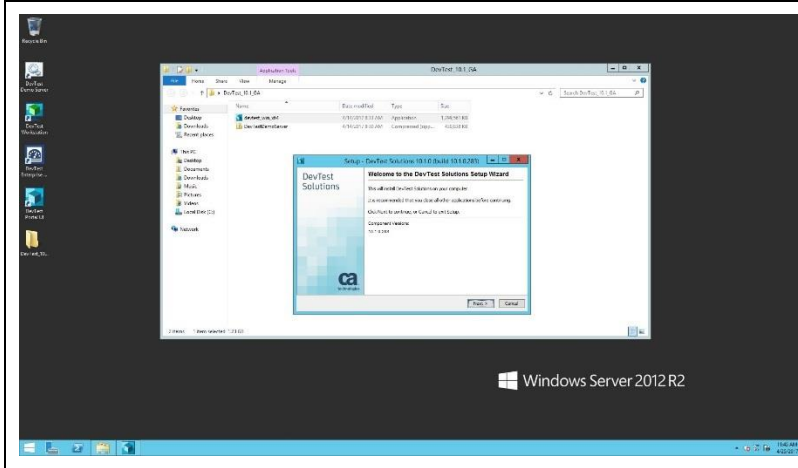
Shutdown the following component services (if your existing DevTest runs as Windows services). This is applicable for the various components installed remotely that connect to the Registry.

- DevTest Enterprise Dashboard
- DevTest Registry Service
- DevTest Coordinator Service
- DevTest Simulator Service
- DevTest VSE Service
- DevTest Portal Service
- DevTest Broker Service

## Upgrade Steps

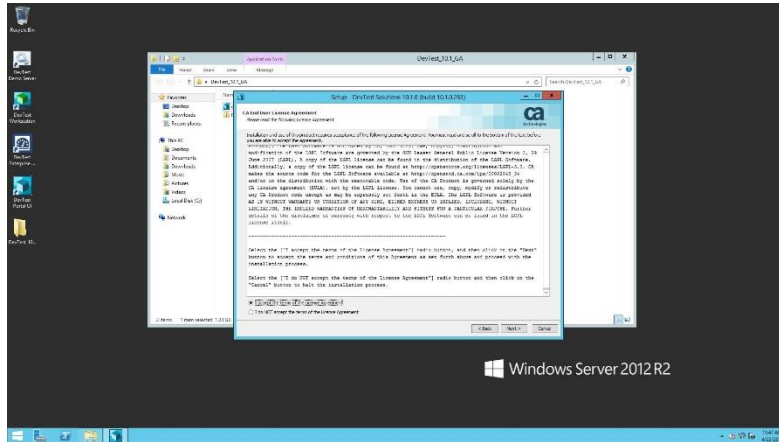


Launch the DevTest installation utility to start the upgrade process.

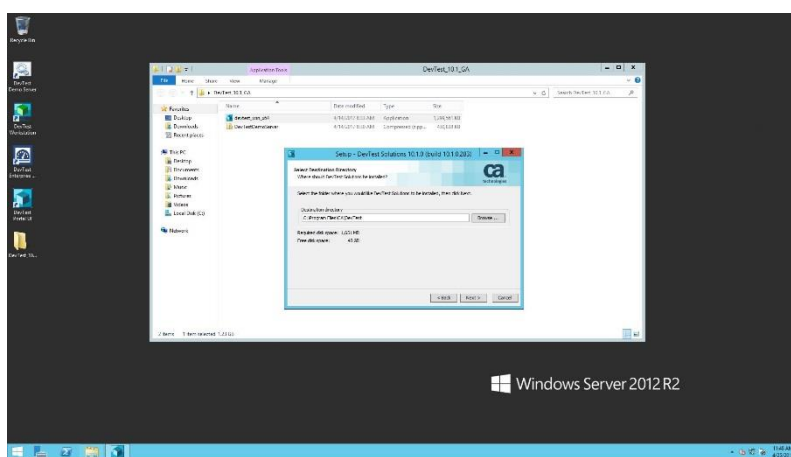


The setup wizard guides you through the install procedure, querying for mandatory and optional product settings.



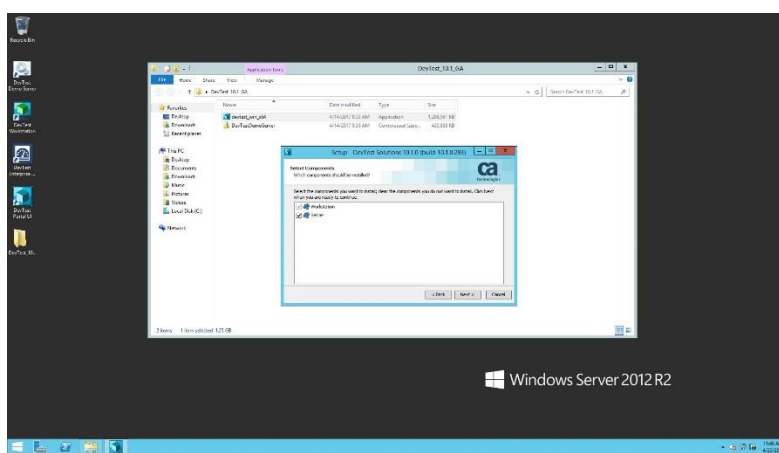


As with other CA products the installer now requires the user to scroll down the entire EULA before being able to accept it.



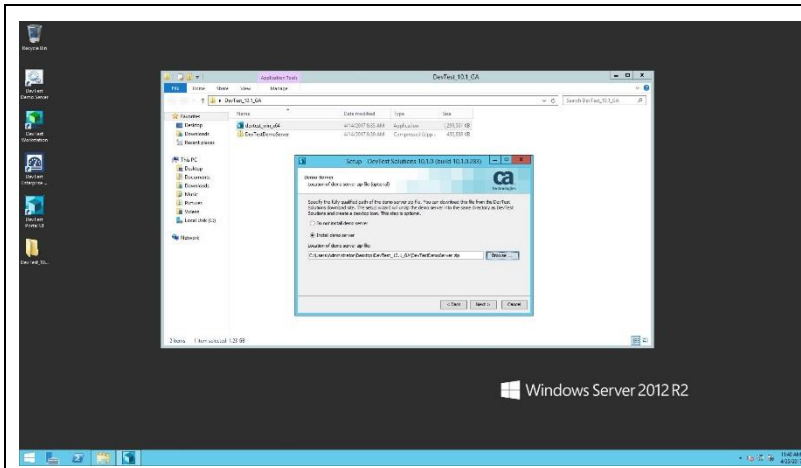
Since you already have DevTest 8.5 installed, the installer picks up that path.

**Note: Make sure you have already taken a backup of this folder. We will be doing an in-place upgrade over the existing installation.**

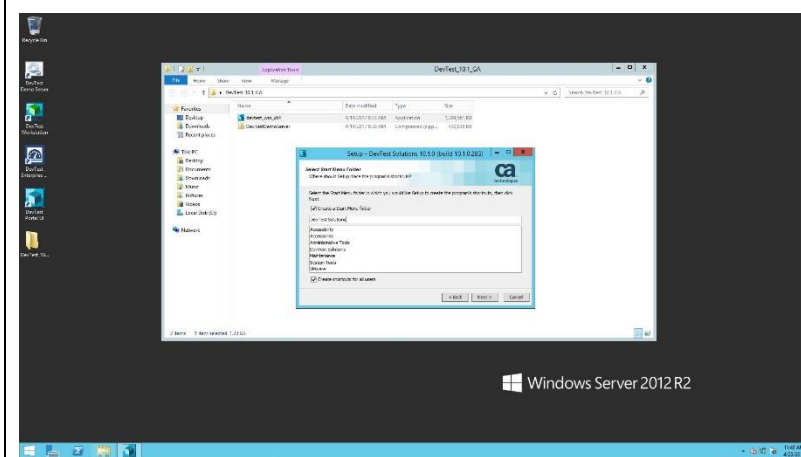


Options are offered to deselect the installation of server components.

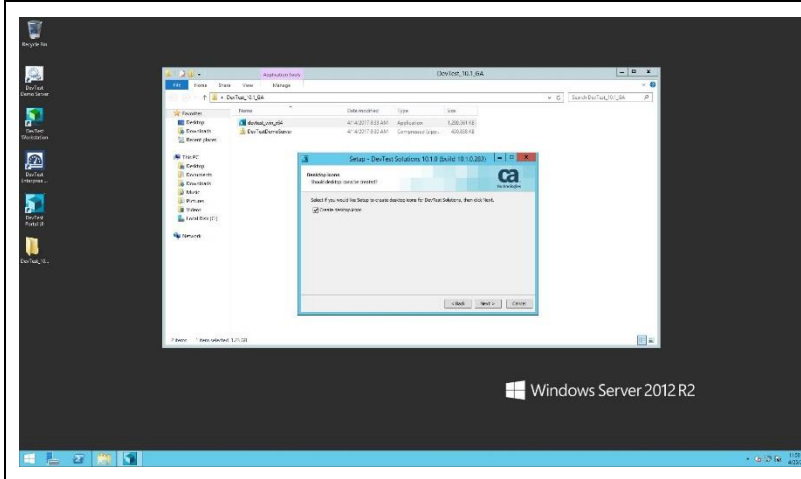
The Workstation component can be deselected only if the server component is deselected before. This means the server installation requires a workstation installation.



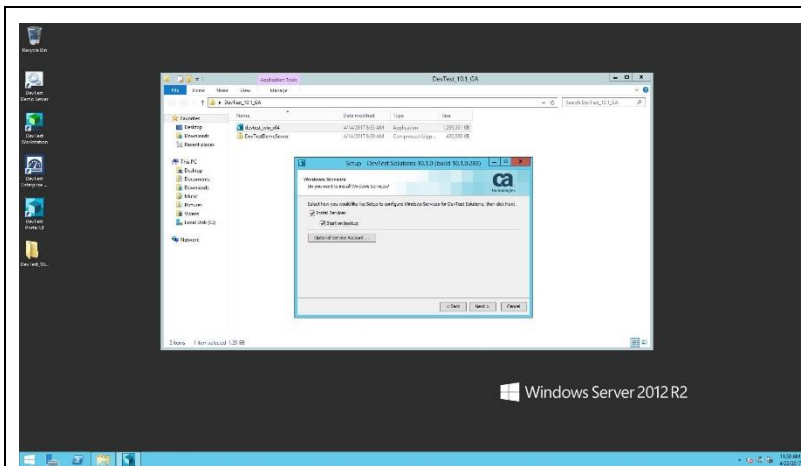
When opting for demo server installation the user must specify the location of the demo server zip file – just as with previous releases.



The installer queries for the name of the Menu Folder for DevTest, and whether or not it will be part of the Windows Start menu and whether or not Menu shortcuts shall be created for all



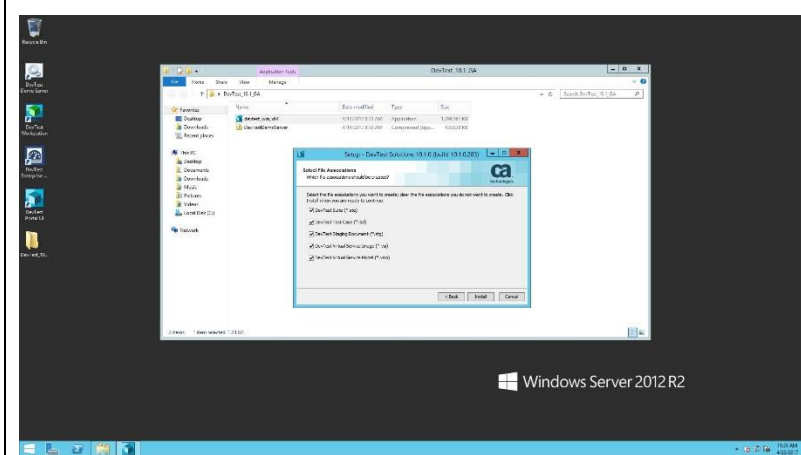
The next question is about whether or not the user wants to have a desktop icon for DevTest solutions.



By default the DevTest services are installed as Windows services.

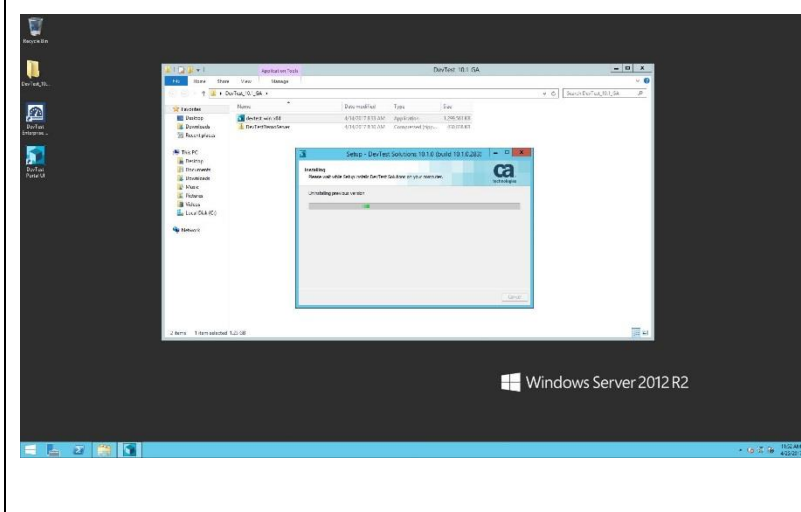
Optionally, the installer can configure the DevTest services for automatic start at system start up. If this is a dedicated DevTest server (and not your local laptop or workstation) we recommend starting DevTest services on bootstrap.

With the default options DevTest services must be started manually (or using the provided script in C:\Program Files\CA\DevTest\examples\Setup).

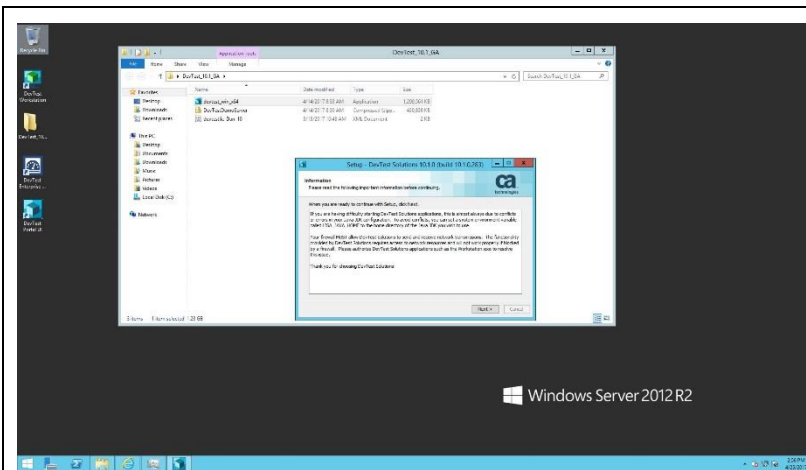


Eventually options are offered to associate file with DevTest solutions.

Clicking on the Install button launches the installation process.

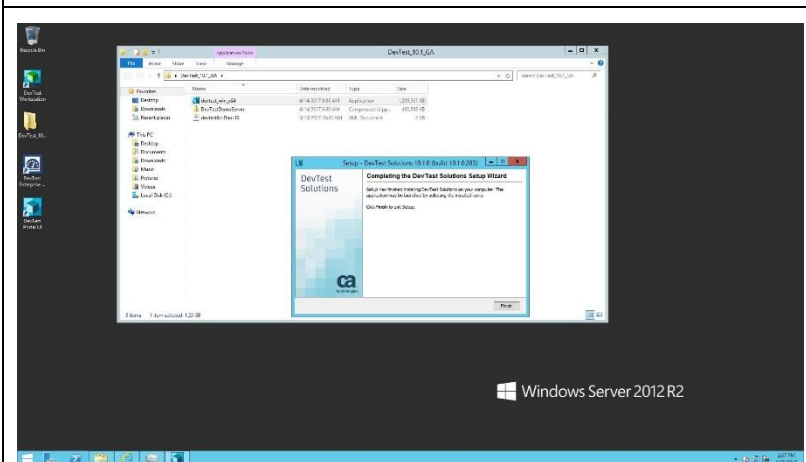


Installation progress is indicated by the progress bar. The installation takes about 5 to 10 minutes to complete.

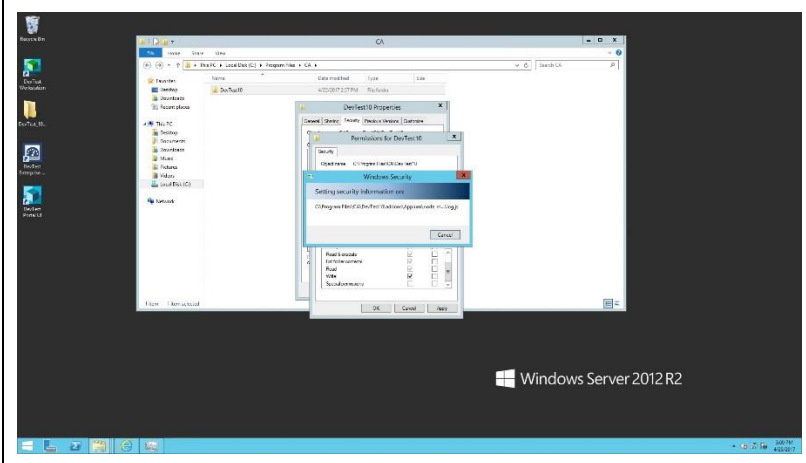


Once the installation is completed some post install instructions are provided. Please read and follow carefully.

Click Next to finish the installation.

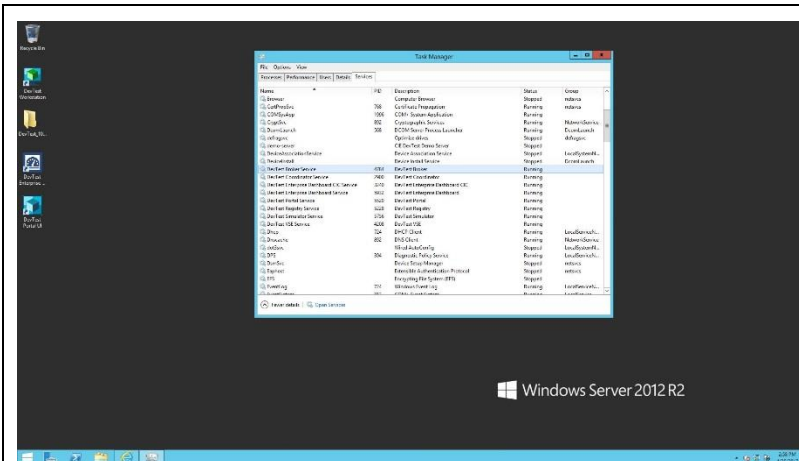


Click Finish to close the Setup Wizard



**Note:** Make sure that the **installation directory** (default on Windows: %PROGRAMFILES%\CA\DevTest) is enabled for **Read/Write access for all users**.

Otherwise import of RR Pairs will fail. Reason: the import will store data in the projects folder under {{LISA\_HOME}}, which is installed at path under %ProgramFiles%

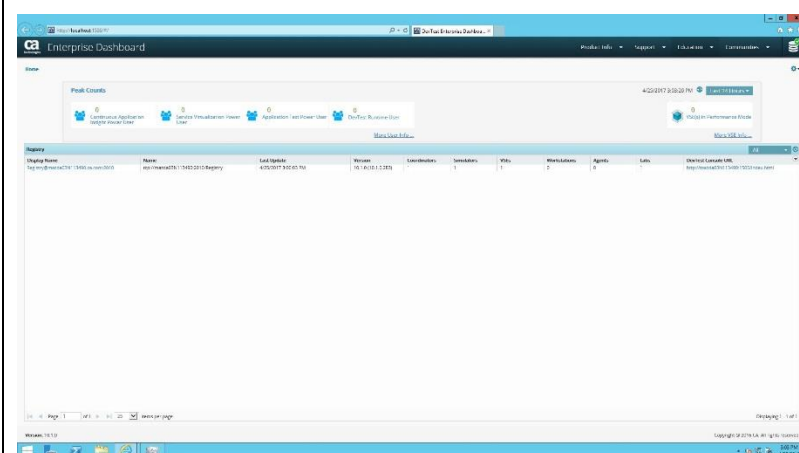


After installation, the DevTest Enterprise Dashboard Service must be started first prior to starting DevTest Registry Service(s), which have to register with the Enterprise Dashboard.

Once registered DevTest Registry services can be started without a running DevTest Enterprise Dashboard Service.

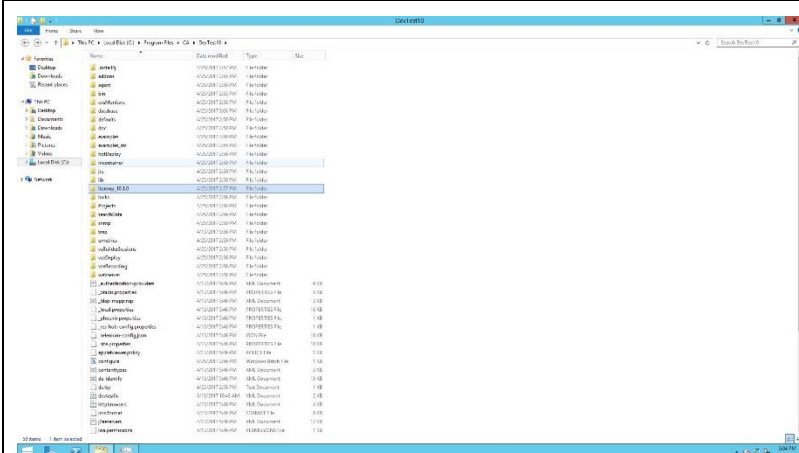
Start the DevTest services in this order –

- DevTest Enterprise Dashboard
- DevTest Registry
- Portal
- Broker
- Coordinator
- Simulator
- VSE



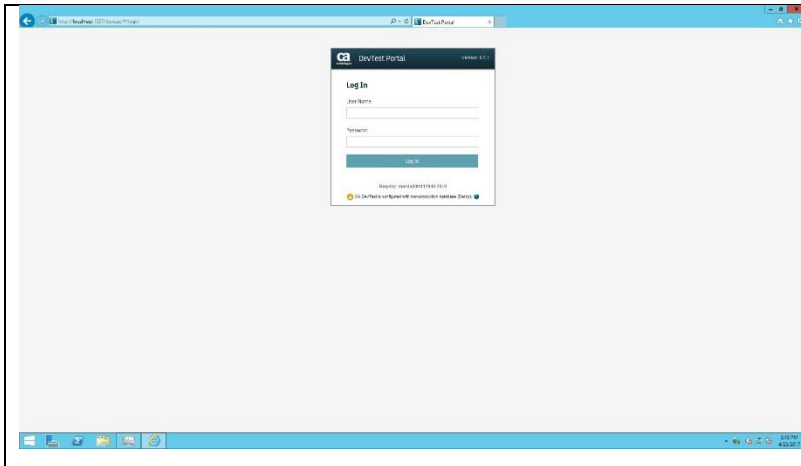
Before you bring up the Enterprise Dashboard UI, be sure to clear and delete your browser cache as the UI for the Enterprise Dashboard has been changed in 10.1.

<http://localhost:1506> should show the new UI and also upgraded Registry information.



Verify that the lisatmp\_10.1.0 folder is created

This is if DevTest is started as (Windows) services. If started as regular application from cmd line lisatmp\_10.1.0 is under %USERS%\<user>



Since this is the first time DevTest is starting, give it about five minutes to load the various components, then verify that you can log in to the DevTest Portal as admin user.

# Chapter 5: Post-Installation Tasks

## Configuring DevTest 10.1

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This section will focus on configuring your DevTest installation and explain some of the changes in DevTest 10.1.

### Licensing

The license policy changed from component-based licensing to concurrent user-based licensing, based on the maximum allowed concurrent user sessions by user type. This information is collected automatically by the Enterprise Dashboard. The Local License Server (LLS) and Internet Based License Server are no longer supported.

The license is file-based, where there is one file per company. This file activates DevTest at the initial startup following installation. The license key file is associated with the Enterprise Dashboard. You will only be prompted for the license key file when installing a new Enterprise Dashboard, not when upgrading an existing Enterprise Dashboard to a new version.

A [Usage Audit Report](#) can help you assess compliance with your license agreement. Users with administrative privileges can access this report from the Enterprise Dashboard.

You can find more information about [license administration](#) in the product documentation. Contact your account team if you have any questions about your specific licensing agreement.

### Enterprise Dashboard

The [Enterprise Dashboard](#) became a required component and was integrated into the DevTest installer. You can [configure Enterprise Dashboard to use an external database](#) by editing the **dradis.properties** file in the **<LISA\_HOME>** directory.

When you do an in-place upgrade with an existing Enterprise Dashboard, the schema of the Enterprise Dashboard database is updated and the existing data is maintained. You do *not* need to create a new database.

The database user must have DBA privileges. Otherwise, the Enterprise Dashboard will fail to start after the upgrade.

You cannot change the type of database during the upgrade process (e.g., you cannot switch from Oracle to SQL Server).

### Registry

When you do an in-place upgrade, the schema of the registry database is updated and the existing data is maintained. You do *not* need to create a new database. The **<LISA\_HOME>\Projects** folder (e.g., C:\Program Files\CA\DevTest\Projects) is also maintained. The registry database is not upgraded by the installer. However, after finishing the upgrading processes by the installer, the first invocation of registry will upgrade the registry database automatically.

The database user must have DBA privileges. Otherwise, the registry will fail to start after the upgrade.

You can no longer configure registries through the Enterprise Dashboard interface. Registries must be configured through the properties files.

You cannot change the type of database during the upgrade process (e.g., you cannot switch from Oracle to SQL Server).

The registry and all the underlying components, including DevTest Workstation, must belong to the same release version. Mixing component versions under a registry is not supported.

### Portal

The [DevTest Portal](#) is a web-based application that is intended to become the primary user interface for DevTest Solutions. The portal provides capabilities for some of the most-used workflows in DevTest. Over time, CA will enhance the functionality of DevTest Portal and will eventually sunset the other interfaces in the DevTest product line, including DevTest Workstation.

Capabilities of DevTest Server Console (e.g., ACL) have been moved to the DevTest Portal.

## Properties Files

It is highly recommended that you review the properties files after the upgrade to confirm all settings have been preserved. Some properties and properties files change during the upgrade and may need to be manually updated (e.g., **dradis.properties** to support LDAP configuration).

- If you created a **local.properties** file, the file is *preserved* as is.
- If you created a **site.properties** file, the file is *preserved* as is.
- A default **\_dradis.properties** file is *created*. Any customized properties for Enterprise Dashboard in your **local.properties** or **site.properties** file are *migrated* to a **dradis.properties** file.
- The default **\_local.properties** file of the existing installation is *replaced* with the 9.5 version.
- The default **\_site.properties** file of the existing installation is *replaced* with the 9.5 version.
- The **lisa.properties** file of the existing installation is *replaced* with the 9.5 version. You should *never* modify the **lisa.properties** file. If you did make changes to the **lisa.properties** file, the upgrade process overwrites the changes. You should move those changes to **site.properties** or **local.properties** before the upgrade.

If you need to change a property to a different value than what is delivered in **lisa.properties**, update the **local.properties** or **site.properties** files. These are delivered as templates, so copy **\_local.properties** to **local.properties** and **\_site.properties** to **site.properties**. Remember the underscore before the properties file name (e.g., **\_local.properties**) means the file is *not* active. Removing the underscore activates the file (and the properties within). Always verify the out-of-the-box settings before adding in external database and security configurations.

Properties files are evaluated in the following order:

- **lisa.properties**
- **site.properties** (take precedence over **lisa.properties**)
- **local.properties** (takes precedence over **site.properties** and **lisa.properties**)
- Command line and **vmoptions** files (takes precedence over all properties defined in any of the properties files)



## Custom Folders

If the existing installation contains any custom folders, the folders are *preserved* as is.

## Custom JAR Files

If the existing installation contains any custom JAR files in the **<LISA\_HOME>\lib** directory, the JAR files are *preserved* as is.

## Memory Allocation Settings

If the existing installation contains any modified **.vmoptions** files in the **<LISA\_HOME>\bin** directory, the files are preserved as is.

## Projects

*The Projects directory will be deleted.* Save your Projects directory outside the **<LISAHOME>** directory (e.g. C:\DevTest\_Projects\_Backup).

## Starting and Stopping DevTest

Start the DevTest Server processes (or services) in the following sequence:

1. Start the Enterprise Dashboard
2. Start each Registry
3. Start DevTest Portal
4. Start the following components in any order:
  - a. Broker
  - b. Coordinator
  - c. Simulator
  - d. Virtual Service Environment

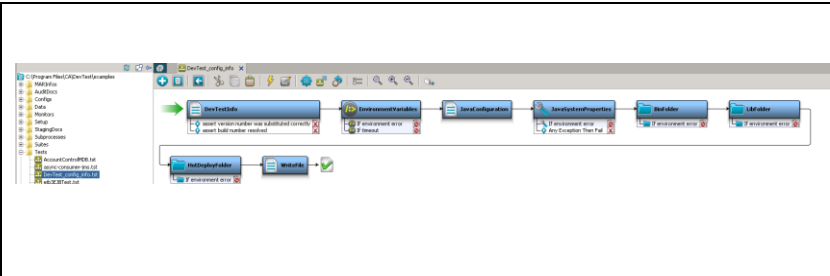
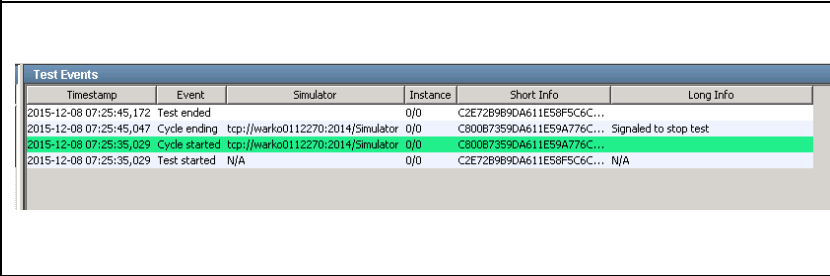
Stop DevTest processes or services in the reverse order.

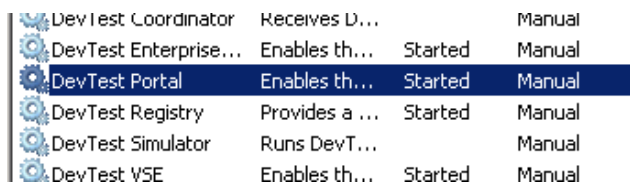
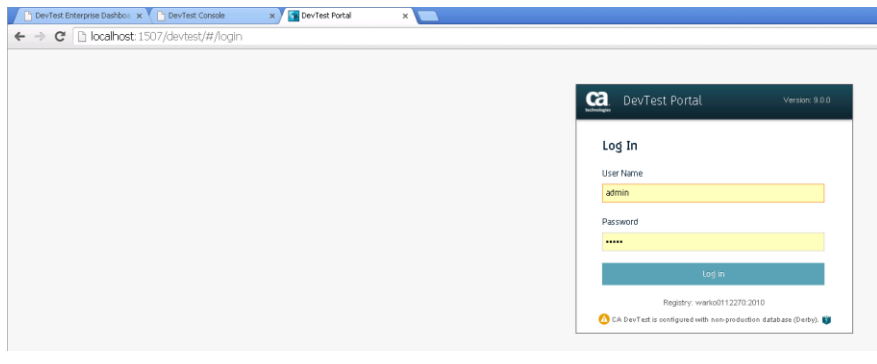
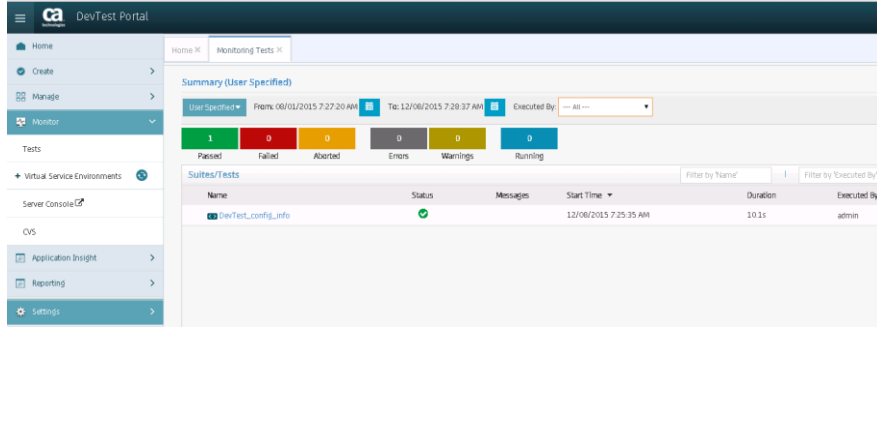
## Access Control and LDAP Configuration

Capabilities of DevTest Server Console have been moved to the DevTest Portal. All ACL configurations must be performed through the Portal.

# Chapter 6: Verifying Installation

## DevTest Workstation and DevTest Portal

	<p>From the shortcut on the desktop, open the DevTest Workstation</p> <p>Login as admin/admin</p> <p>The Examples project opens by default</p> <p>Expand the Tests folder and double-click to select and open the DevTest_config_info.tst test</p>
	<p>Right click and Stage this test to the coordinator and start the test</p> <p>This test should complete successfully.</p>

 <table><thead><tr><th>Service Name</th><th>Description</th><th>Status</th><th>Startup Type</th></tr></thead><tbody><tr><td>DevTest Coordinator</td><td>Receives D...</td><td>Stopped</td><td>Manual</td></tr><tr><td>DevTest Enterprise...</td><td>Enables th...</td><td>Started</td><td>Manual</td></tr><tr><td>DevTest Portal</td><td>Enables th...</td><td>Started</td><td>Manual</td></tr><tr><td>DevTest Registry</td><td>Provides a ...</td><td>Started</td><td>Manual</td></tr><tr><td>DevTest Simulator</td><td>Runs DevT...</td><td>Started</td><td>Manual</td></tr><tr><td>DevTest VSE</td><td>Enables th...</td><td>Started</td><td>Manual</td></tr></tbody></table>	Service Name	Description	Status	Startup Type	DevTest Coordinator	Receives D...	Stopped	Manual	DevTest Enterprise...	Enables th...	Started	Manual	DevTest Portal	Enables th...	Started	Manual	DevTest Registry	Provides a ...	Started	Manual	DevTest Simulator	Runs DevT...	Started	Manual	DevTest VSE	Enables th...	Started	Manual	<p>From Windows Services, verify that the DevTest Broker service is running. If not, start this service</p> <p>Start the DevTest Portal service</p>
Service Name	Description	Status	Startup Type																										
DevTest Coordinator	Receives D...	Stopped	Manual																										
DevTest Enterprise...	Enables th...	Started	Manual																										
DevTest Portal	Enables th...	Started	Manual																										
DevTest Registry	Provides a ...	Started	Manual																										
DevTest Simulator	Runs DevT...	Started	Manual																										
DevTest VSE	Enables th...	Started	Manual																										
	<p>Once the service starts, wait for about 3-5 minutes (for the first time only). Then go to the DevTest Portal UI at port 1507</p> <p>Login as admin/admin</p>																												
 <table><thead><tr><th>Summary (User Specified)</th></tr><tr><td>User Specified: From: 08/01/2015 7:27:20 AM To: 12/08/2015 7:28:37 AM Executed By: -- All --</td></tr><tr><td>1 Passed 0 Failed 0 Aborted 0 Errors 0 Warnings 0 Running</td></tr><tr><td>Suites/Tests</td></tr><tr><th>Name</th><th>Status</th><th>Messages</th><th>Start Time</th><th>Duration</th><th>Executed By</th></tr></thead><tbody><tr><td>DevTest_config_info</td><td>✓</td><td></td><td>12/08/2015 7:25:35 AM</td><td>10.1s</td><td>admin</td></tr></tbody></table>	Summary (User Specified)	User Specified: From: 08/01/2015 7:27:20 AM To: 12/08/2015 7:28:37 AM Executed By: -- All --	1 Passed 0 Failed 0 Aborted 0 Errors 0 Warnings 0 Running	Suites/Tests	Name	Status	Messages	Start Time	Duration	Executed By	DevTest_config_info	✓		12/08/2015 7:25:35 AM	10.1s	admin	<p>Click on the Monitor tab and then on the Tests. You should see your test(s) as passed.</p> <p>To get more information on the Test Case, click on the Name link of the test case to drill down into the details.</p> <p>You can click on each step of the test case to drill further down into greater details and look at the request data and the response data!</p>												
Summary (User Specified)																													
User Specified: From: 08/01/2015 7:27:20 AM To: 12/08/2015 7:28:37 AM Executed By: -- All --																													
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Name	Status	Messages	Start Time	Duration	Executed By																								
DevTest_config_info	✓		12/08/2015 7:25:35 AM	10.1s	admin																								

# Chapter 7: Connecting Pre- 9.1 Registries to 10.1 Dashboard

The Enterprise Dashboard starting with 9.1+ has been enhanced to receive REST calls from the 9.1 onwards Registries.

As a result, simply pointing a pre-9.1 Registry to this new Dashboard will not display any data.

```
Select Administrator: Command Prompt - EnterpriseDashboardCIC.exe

C:\Program Files\CA\DevTest\bin>EnterpriseDashboardCIC.exe
Locale: en_US
Setting System.out and System.err to: Cp1252
LISA_HOME set to C:\PROGRA~1\CA\DevTest\
DevTest temporary directory is C:\Users\Administrator\lisatmp_9.1.0
Configuring logging from 'C:\PROGRA~1\CA\DevTest\logging.properties'
DevTest Solutions Version :: 9.1.0 (9.1.0.399)
Installed patches: none

Starting Enterprise Dashboard legacy registry bridge, service=tcp://varko01N1770
:2003/EnterpriseDashboard
Tue Mar 08 10:49:58 EST 2016 : Apache Derby Network Server - 10.8.3.0 - (1405108
> started and ready to accept connections on port 1531
```

Let's look at a scenario where you have an older Registry pre-9.1 and you want to connect it to the DevTest 10.1's Dashboard.

As a first step, **on the 10.1 Dashboard machine**, you will start a process called as EnterpriseDashboardCIC.exe from the command line. This file is located in the DevTest\bin folder.

Open a command prompt with the appropriate path and run the command as shown

The process starts and waits for any legacy (pre 9.1 registries to connect)

```
laf.password.encrypt=13a0eef51bedf0fdb7e8d6740632c27
lisa.acl.auth.enabled=true

lisa.enterprisedashboard.url=tcp://10.130.174.58:2003/Enterprise
Dashboard
```

As a second step, on the older registry machine, open up the local.properties for the Registry and add the following line to it –

*lisa.enterprisedashboard.url=tcp://<your-10.1-Dashboard>:2003/EnterpriseDashboard*

Save the file and restart your older Registry.



Registry Name	Name	Last Update	Version	Coordinates	Simulators	VSEs	Workstations	Agents	Lab	DevTest Console URL
Registry010.130.174.58.2010	tcp://10.130.174.58:2010/Registry	3/9/2016 11:00:03 AM	9.1.0 (9.1.0.399)	1	1	1	0	1	1	http://10.130.174.58:1505/index.html
Registry@varko01-4740704.ca.com.201	tcp://varko01-4740704.2010/Registry	3/9/2016 11:00:03 AM	8.0.2 (8.0.2.724)	0	0	0	0	0	1	http://varko01-4740704.1505/index.html
Registry@varko01N1770.2010	tcp://varko01N1770.2010/Registry	3/9/2016 11:04:48 AM	7.5.2 (7.5.2.235)	1	1	1	0	0	1	http://varko01N1770.1505/index.html

You should see the older registry show up in the 10.1 Dashboard.

```
#####
#####
###
### SECTION 1 - ENTERPRISE DASHBOARD
###
#####
#####
## =====
## DevTest Enterprise Dashboard
## This is the Service URL to use for sending component and
metric information
## to the DevTest Enterprise Dashboard
## =====
lisa.enterprisedashboard.service.url=tcp://10.130.174.58:2003/Ent
erpriseDashboard
```

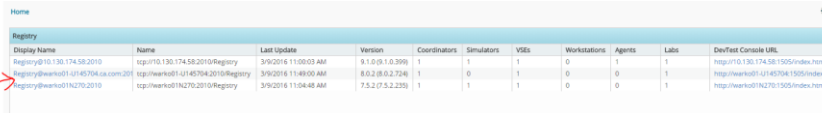
You will notice another Registry in there as well the 8.0.2 registry.

The property to point an 8.x registry to 9.1 dashboard is different than the one we used for 7.5.2.

*lisa.enterprisedashboard.service.url=tcp://<your-10.1-Dashboard>:2003/EnterpriseDashboard*

Modify the above line in site.properties file.

Save the file and restart your Lisa 8.x Registry.



Registry Name	Name	Last Update	Version	Coordinators	Simulators	VSEs	Workstations	Agents	Labs	DevTest Console URL
Registry@10.130.174.58.2010	tcp://10.130.174.58:2010/Registry	3/9/2016 11:00:03 AM	8.1.0 (8.1.0.399)	1	1	0	1	1	1	http://10.130.174.58:1505/index.html
Registry@weat0112145704.ca.com.201	tcp://weat0112145704:2010/Registry	3/9/2016 11:49:00 AM	8.0.2 (8.0.2.724)	1	0	1	0	0	1	http://weat0112145704:1505/index.html
Registry@weat0119270.2010	tcp://weat0119270:2010/Registry	3/9/2016 11:04:48 AM	7.5.2 (7.5.2.235)	1	1	1	0	0	1	http://weat0119270:1505/index.html

You should now see the 8.x registry in the 10.1 dashboard.

Now you can continue to use all the great new features of DevTest 10.1!