Quali



Spirent TestCenter Chassis Shell 2G

Release date: May 2018

Shell version 2.0.0

Document version A

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# Overview

A Shell implements integration of a device model, application or other technology with CloudShell. A shell consists of a data model that defines how the device and its properties are modeled in CloudShell, along with automation that enables interaction with the device via CloudShell.

## About STC Chassis Shell 2nd Generation

This 2nd generation Shell provides you with connectivity and management capabilities such as device structure discovery and power management for Spirent TestCenter (STC) chassis.

## Standard version

The STC Chassis 2nd generation shell 2.0.0 is based on the Traffic Shell standard cloudshell\_traffic\_generator\_chassis\_standard\_1\_1\_0.yaml.

For detailed information about the Shell’s structure and attributes, see the Traffic Shell standard on [cloudshell-standards repository](https://github.com/QualiSystems/shell-traffic-standard) in GitHub.

## Supported OS

* Windows

## Requirements

* CloudShell version 7.1 and above

## Supported STC

* Any version that supports lab server with REST API or stcweb service.

## 

## Downloading the Shell

The STC Chassis Shell is available from the [Quali Developer Center](http://community.quali.com/spaces/12/index.html?__hstc=46213176.aaafbe5adb338215377a985e0c025079.1467146361756.1471392182746.1471395614692.11&__hssc=46213176.1.1471395614692&__hsfp=2437115919)[.](https://support.qualisystems.com/entries/87063688-Solution-Pack-Download-Center) Download the files into a temporary location on your local machine.

The Shell comprises:

|  |  |
| --- | --- |
| stc\_chassis\_shell.zip | The Shell Package. |
| stc\_chassis\_shell\_offline\_requirements.zip | Shell Python dependencies (**for offline installation only**) |
| STC Chassis Shell Doc.pdf | Documentation |

# Import and Configure the Shell

This section describes how to import, configure and modify the STC Chassis Shell.

## Importing the Shell into CloudShell

Use the following procedure to import the downloaded Shell:

**To import the Shell into CloudShell:**

1. Download the Shell from the [Quali Developer Center](http://community.quali.com/spaces/12/index.html?__hstc=46213176.aaafbe5adb338215377a985e0c025079.1467146361756.1471392182746.1471395614692.11&__hssc=46213176.1.1471395614692&__hsfp=2437115919)[.](https://support.qualisystems.com/entries/87063688-Solution-Pack-Download-Center)
2. Backup your database.
3. Log in to **CloudShell Portal** as administrator of the relevant domain.
4. In the **User** menu select **Import Package.**



5. Browse to the location of the downloaded Shell file, select the relevant .zip file and Click **Open**. Alternatively, drag the shell’s .zip file into CloudShell Portal.

## Offline installation of a Shell

**Note:** Offline installation instructions are relevant only if Cloudshell Execution Server has no access to PyPi. You can skip this section if your execution server has access to PyPi. *For additional information, see the online help topic on offline dependencies.*

The Shell uses a variety of Python packages. To work in offline mode perform the following steps:

1. Download the stc\_chassis\_shell\_offline\_requirments.zip file (see *Downloading the Shell*).
2. Unzip it to a local repository. Make sure the execution server has access to this folder.
3. On the Execution Server machine, in the customer.configfile, add the following key:

|  |  |
| --- | --- |
| <add key="PythonOfflineRepositoryPath" value="repository | |
| full path"/> |  |

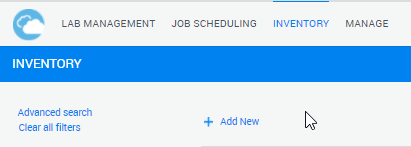
Make sure to update the value with the path to the repository containing the unzipped file.

1. Restart the Execution Server.

## Configuring a new device

Use the following procedure to load a device, which will use this Shell, into CloudShell:

1. In the CloudShell Portal, in the **Inventory** dashboard, click **Add New**.



1. From the list, select the **STC Chassis Shell 2G**.
2. Enter the STC chassis Name and IP address.
3. Click **Create**.
4. In the **Resource** dialog box, enter the device’s settings, as following:

Controller Address: address of the Spirent Lab Server or server running stcweb service.

Controller TCP Port: port number for stcweb service or empty for lab server (the system will use default port 80 in this case).

1. Click **Start Discovery**.

This command discovers the device, fills in its attributes and creates the device’s structure in CloudShell (if such structure exists).

# Updating Python Dependencies for Shells

This section how to update your Python dependencies folder. This is required when you upgrade a Shell, driver that has new/updated dependencies. It applies to both online and offline dependencies.

## Updating offline Python dependencies

**To update offline Python dependencies:**

1. Download the latest Python dependencies package zip file locally.
2. Extract the zip file to the suitable offline package folder(s).
3. Restart any execution server that have a live instance of the relevant driver or script. This requires running the TestShell Execution Server's configuration wizard, as explained in the Configure the TestShell Execution Server topic of the CloudShell Suite Installation Guide - see the [CloudShell Docs & Training](http://www.quali.com/community/training/) page.

## Updating online Python dependencies

In online mode, the execution server automatically downloads and extracts the appropriate dependencies file to the online Python dependencies repository every time a new instance of the driver or script is created.

**To update online Python dependencies:**

* If there is a live instance of the Shell's driver or script, restart the execution server, as explained above. If an instance does not exist, the execution server will download the Python dependencies the next time a command of the driver or script runs.

# Typical workflow

Scenario 1 – Discover a new Device

See *Configuring a new device*.

# References

Additional technical documentation is available in the [Quali's Developer Center](http://community.quali.com/spaces/12/index.html?__hstc=46213176.aaafbe5adb338215377a985e0c025079.1467146361756.1471392182746.1471395614692.11&__hssc=46213176.1.1471395614692&__hsfp=2437115919)[.](https://support.qualisystems.com/entries/22858046-download-center)

For Quali discussion forums, click [here](http://community.quali.com/spaces/13/index.html?__hstc=46213176.aaafbe5adb338215377a985e0c025079.1467146361756.1471392182746.1471395614692.11&__hssc=46213176.1.1471395614692&__hsfp=2437115919)[.](https://support.qualisystems.com/)

# Release notes

**What’s new:**

* Use shells 2nd generation standard.
* Replace Tcl API with REST.

**Known issues:**

* NA