

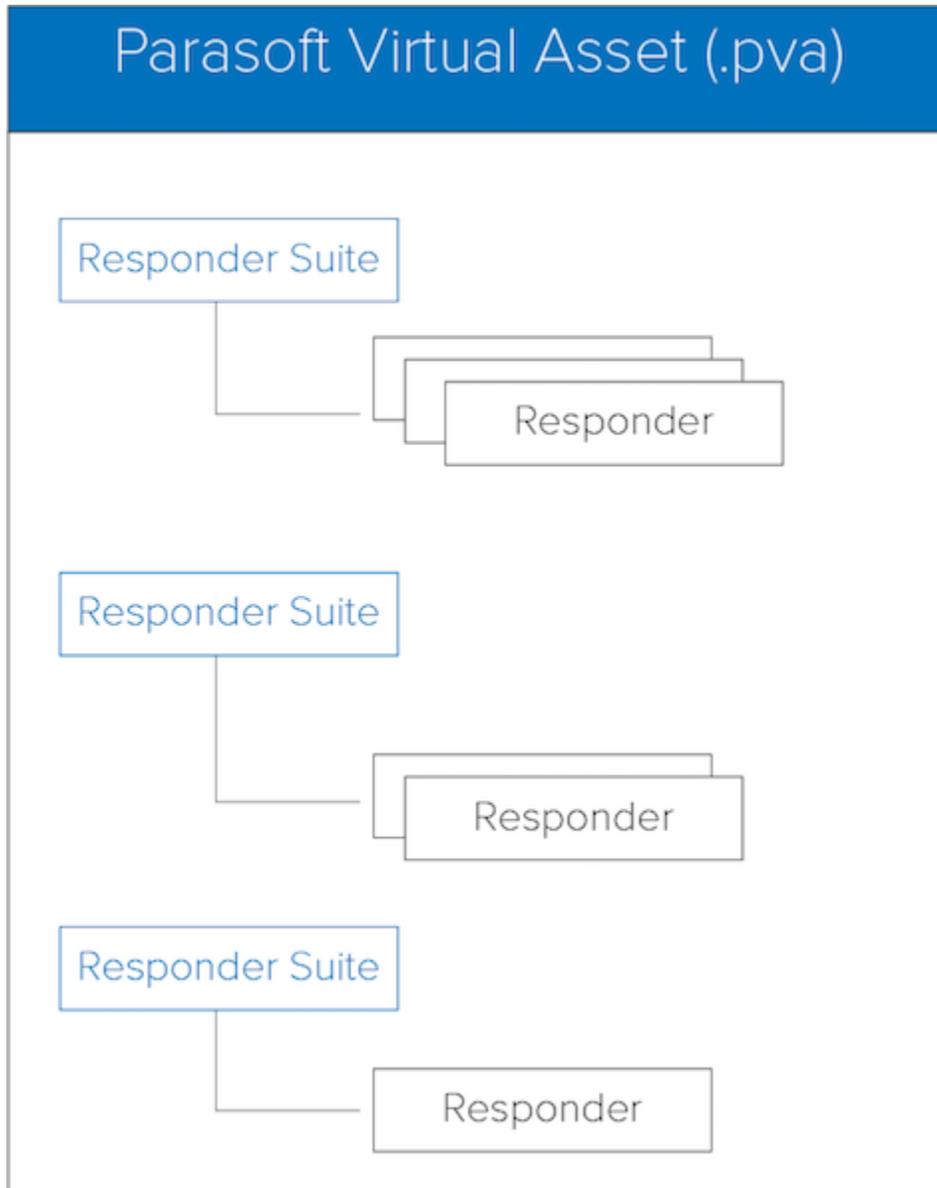
Deploying Virtual Assets - Overview Virtualize

This section provides an overview of deployment options for your virtual assets. Sections include:

- [Introduction](#)
- [Recommended Workflow](#)
- [Local and Remote Deployment Options](#)
- [Organizing Deployed Virtual Assets](#)

Introduction

A virtual asset is a collection of entities configured to simulate the behavior, performance, and data on which the application under test (AUT) is dependent. Virtual assets are represented in files with a .pva extension. Parasoft Virtual Asset files contain one or more Responder suites. Responder suites are collections of one or more Message Responders and/or SQL Responder tools.

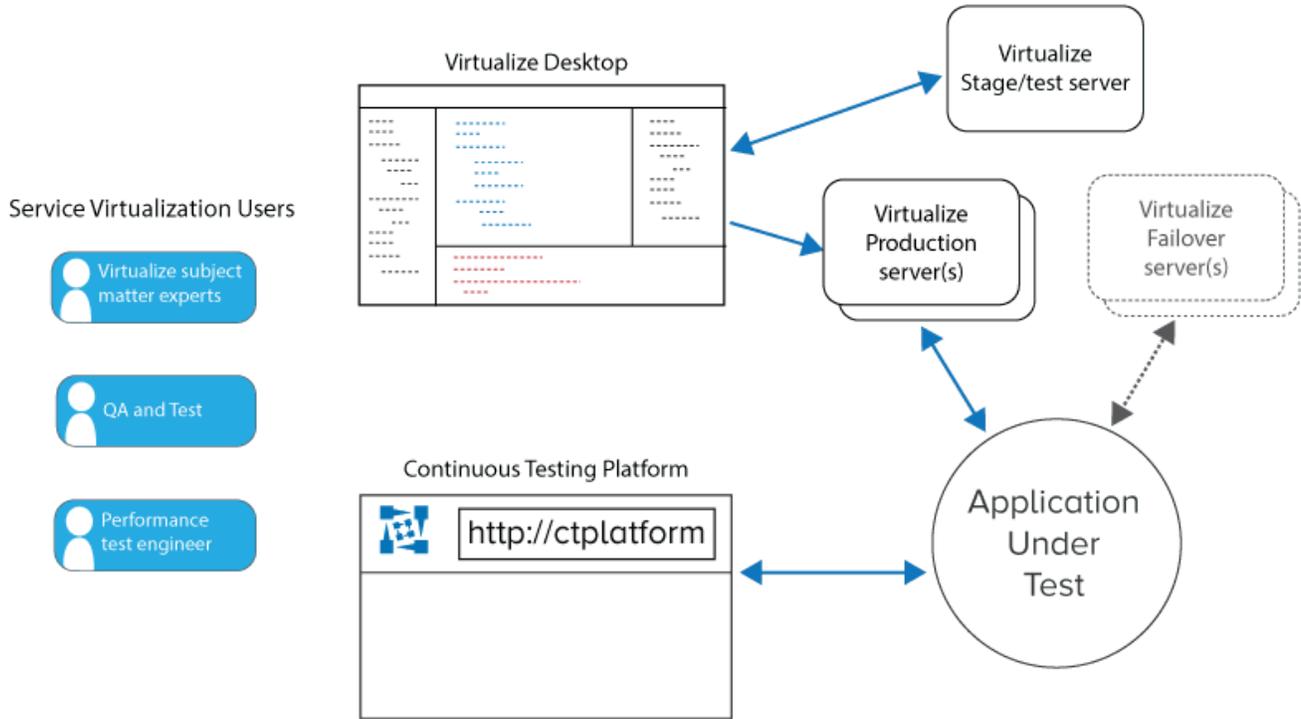


You can deploy virtual assets to a local or remote Virtualize Server and configure the AUT to use the virtualized services represented in its Responder suites.

Recommended Workflow

The recommended workflow is to first use the Virtualize Desktop GUI to deploy a newly-created virtual asset to a "staging" remote server in order to validate that it works as expected and to fine-tune its behavior. You can think of this as your dedicated staging server for testing newly-created virtual assets.

Then, once the virtual asset is operating properly, you can use the Virtualize Desktop GUI to move it to a "production" Virtualize server for centralized, team-wide access. You can think of this as your dedicated "Production" server where your created virtual assets are actually consumed. This re-deployment can be done by simply dragging the related .pva file from the remote "Staging" server to the remote "Production" server host (in the Virtualize Server view).



Local and Remote Deployment Options

Deploying virtual assets to a Virtualize Server makes them available for use within your virtual environment. You can deploy virtual assets to a remote or local server.

Remote Servers

You can run Virtualize Server on a dedicated machine and connect to it remotely from your Virtualize desktop or from Continuous Testing Platform. Using a dedicated remote machine enables you to provide continuous access to appropriate team members and project stakeholders. There are several options for deploying remote Virtualize Servers.

- Right-click the remote Virtualize server's node (or the **Virtual Assets** node or any virtual asset folder/subfolder node) then choose **Add Virtual Asset**. See [Add Virtual Asset Wizard](#) for details.
- Copy and paste a virtual asset from the **Local Machine** node to the remote Virtualize server's node in the Virtualize Server view. See [Drag/Drop or Copy/Paste](#) for details.
- Drag and drop a virtual asset from the **Local machine** node to the remote Virtualize server's node in the Virtualize Server view. See [Drag/Drop or Copy/Paste](#) for details.

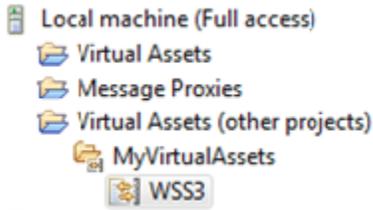
Local Servers

You can also run an instance of Virtualize Server on your local machine. As you create virtual assets, you can use the Virtualize Server View in the desktop GUI to manage and configure them. There are several options for deploying local instances of Virtualize Server.

- Right-click the **Local machine** node, **Virtual Assets** node, or any virtual asset folder/subfolder node, then chose **Add Virtual Asset**. See [Add Virtual Asset Wizard](#) for details.
- Create virtual assets within the **VirtualAssets** project.
- Drag and drop (or copy) a .pva file to the **VirtualAssets** project in the local workspace. See [Drag/Drop or Copy/Paste](#) for details.
- Drag and drop a .pva file to the **Local machine** node in the Virtualize Server view. See [Drag/Drop or Copy/Paste](#) for details.
- Copy and paste a virtual asset from a remote Virtualize Server view node to the **Local machine** node. See [Drag/Drop or Copy/Paste](#) for details.
- Drag and drop a virtual asset from a remote Virtualize Server view node to the **Local machine** node. See [Drag/Drop or Copy/Paste](#) for details.

VirtualAssets Project

Virtual assets must be deployed in the VirtualAssets project in the Virtualize Server view.



The **Virtual Assets (other projects)** folder contains assets deployed in other projects. These assets can remain deployed in the current location until you start updating them. When you are ready to modify them, move the virtual assets (and any dependent files) to the VirtualAssets project.

Drag/Drop or Copy/Paste

The fastest way to deploy a virtual asset to a local or remote server or to move virtual assets from one server to another is as follows:

1. In the Virtualize Server view, find the node representing the local or remote server to which you want to deploy the virtual assets.
2. Drag (or copy/paste) the virtual asset to that node. You can drag or copy virtual assets from other servers, or .pva files from the Virtual Asset Explorer or Navigator. Additionally, you can drag or copy related assets (such as a .csv or .xls/.xlsx data source used by the virtual asset) from the Virtual Asset Explorer or Navigator.

You can use this procedure for a variety of purposes, including:

- To deploy a newly-created virtual asset to the local server in order to validate and fine-tune its operation.
- To move a properly-functioning virtual asset from the local server to a remote server for team-wide use.
- To move a virtual asset from the remote server to a local server for editing, then re-deploy the modified virtual asset to the remote server.
- To update the .pva file used by any already-deployed virtual asset.

Alternatively, you can deploy virtual assets to the local server by adding the related .pva file to the VirtualAssets project (through drag and drop, copy/paste, or a source control update).

Add Virtual Asset Wizard

Deploying virtual assets using the wizard provides additional control over the deployment process, such as modifying the default endpoint:

1. In the Virtualize Server view, right-click the node indicating where you want to deploy the virtual asset and choose **Add Virtual Asset**.
2. Specify the path to the Responder suite that contains your Responder tools and click **Next**.
3. Modify the endpoint if desired and click **Finish**.

Customizing Virtual Asset Deployment

For details on how to customize advanced options for virtual asset deployment, see [Configuring Server and Deployment Settings](#).

Re-Deploying Modified Virtual Assets

Virtual Assets are automatically redeployed when you save changes to the asset. Any time that you open an already deployed .pva on the local server, modify it, then save the editor, it will redeploy automatically. Automatic redeployment of all virtual assets also takes place when a data source file (Excel spreadsheet [.xls or .xlsx] or CSV) is modified.

If you want to prompt Virtualize to re-deploy all assets, right-click the appropriate machine node in the Virtualize Server view and choose **Re-Deploy All Virtual Assets** from the shortcut menu.

Virtual Assets and Global MQ Manager Connections

Virtual assets can connect to an MQ manager using a global configuration or a local configuration. Global configurations are defined per Virtualizer Server and can be used by virtual assets and proxies deployed to the server (see [Connections Tab](#)). Local configurations are defined for individual assets or proxies.

You can not deploy an asset or proxy connected to a global MQ manager if the MQ manager connection configuration does not exist on the destination Virtualize Server. If you need to move or copy a asset/proxy to another Virtualize Server, you can manually define the MQ manager connection or use the copy function to add the connection settings to the destination server (see [Copying an MQ Manager Connection](#)).

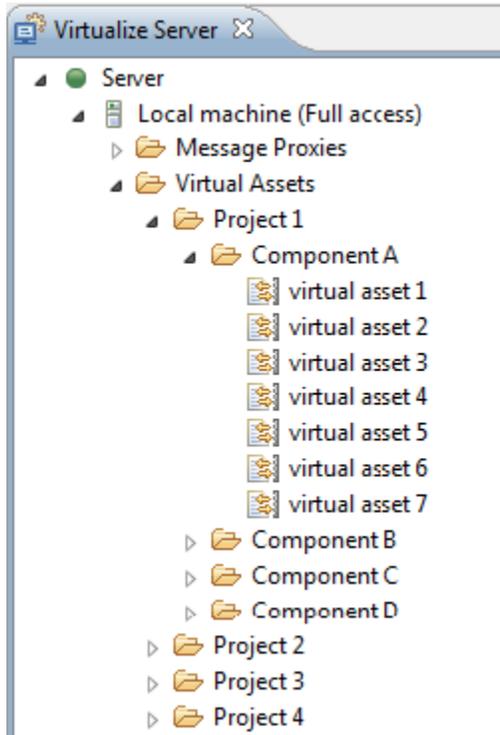
Interacting with Virtualize Servers

For details on starting, stopping, and interacting with remote and local servers, see:

- [Working with the Local Virtualize Server](#)
- [Working with a Remote Dedicated Virtualize Server](#)

Organizing Deployed Virtual Assets

If you want to organize the deployed virtual assets in the VirtualAssets project into logical groupings, you can specify a hierarchical structure. For instance, if you wanted to organize virtual assets into 4 projects, each which is organized by project components, you might create the following structure:



You can specify a hierarchical structure from the:

- Virtualize Server view (as described below).
- VirtualAssets project in the Navigator view (using Eclipse controls, such as **File> New> ...**).
- Workspace's VirtualAssets folder in the file system (using file system controls, such as those provided by Windows Explorer).

Any changes made in one area will be automatically reflected in the others.

Organizing Virtual Assets from the Virtualize Server View

From the Virtualize Server view, you can perform the following actions to organize virtual assets:

- Add folders and subfolders (via right-click commands)
- Rename folders and subfolders (via right-click commands)
- Copy and paste virtual assets, folders, and subfolders (via right-click commands)
- Drag and drop virtual assets, folders, and subfolders
- Delete virtual assets, folders, and subfolders (via right-click commands)

Additional Information

- If you delete a virtual asset from the Virtualize Server view, you will be given the option to remove the corresponding .pva from the server.
- Folders with deployed assets will be marked with a special icon.
- (For users migrating from version 9.5 and earlier) If you have assets that were previously deployed in projects other than the Virtual Assets project, the Virtualize Server view display them in under a folder with the name of their respective project. No folder hierarchies will be reflected in such assets.