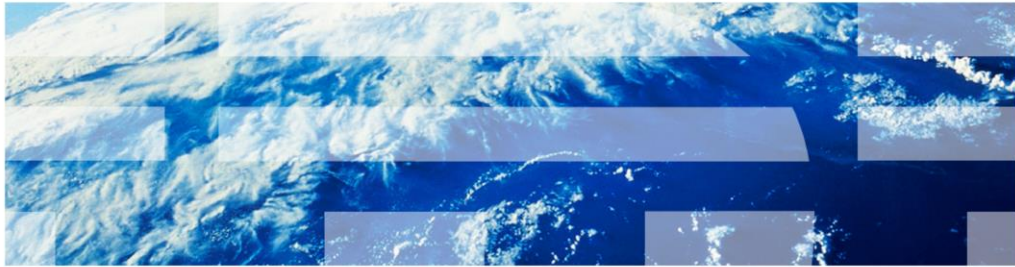


# IBM Workload Deployer V3.1

## Virtual application layers



This presentation will cover IBM Workload Deployer V3.1 virtual application layers.

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The presentation will give an in-depth look at layers.

Section

## ***Overview***

This section covers the overview.

## Layers overview

- Layers offer a way to incrementally build out a virtual application
- Allow you to control the complexity and reuse of virtual applications
- Constructed in the Virtual Application Builder tool



Layers offer a way to incrementally build out your virtual application based on predefined usage scenarios. You construct and apply layers using the Virtual Application Builder tool.

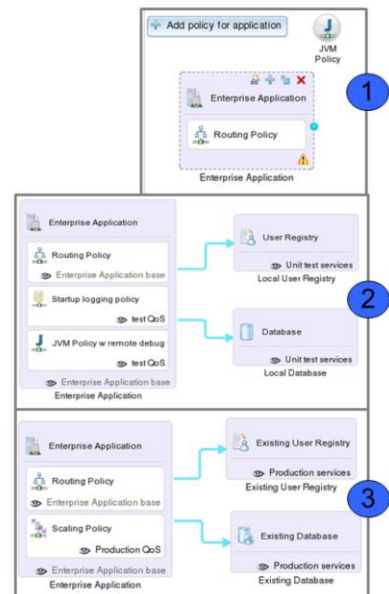
Layers allow you to control the reuse and visual complexity of virtual applications in the virtual application builder. Layers are essentially overlays of additional components, links and policies to meet different usage scenarios.

Layers allow you to control the scope and complexity of what is displayed and editable while editing an application pattern. Disabling a layer makes the items in the layer not editable.

Layers do not impact deployment. All components, links, and policies in the pattern are deployed.

## Example

- Example usage scenario for layers:
  1. Base virtual application with
    - Policies common to all derivatives
  2. Pattern for **unit test** environment
    - Base virtual application
    - Logging policy for startup logs
    - JVM Policy to support debugging
    - Registry and database deployed with virtual application
  3. Pattern for **production** environment
    - Base virtual application
    - Scaling Policy to support high availability
    - External production registry and database



Virtual application layers

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The example on this slide covers two usage scenarios.

The first example is the base virtual application definition with policies and settings that are common to all environments where the application is deployed. Defining the JVM policy at the application level allows it to be overridden in other deployment scenarios. Notice the yellow triangle, it indicates some configuration is incomplete. This pattern is not meant to be deployed; instead it will act as the base layer for the deployment scenarios. Any changes to this pattern are automatically reflected in patterns that use it as a base.

The second example is a pattern that will be deployed internally for development and test where workload demands are known to be even and low. This pattern adds logging and remote debug policies, and includes a database and user registry as virtual machines within the virtual application.

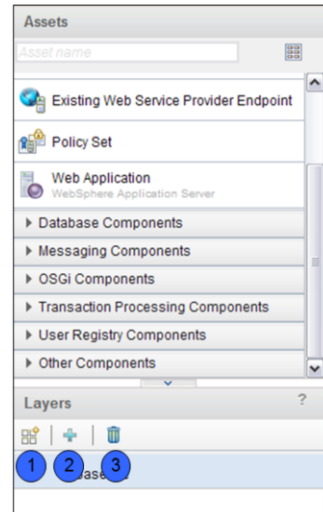
The third example is a pattern that will be deployed in a production environment where workload demands are erratic. This pattern adds a scaling policy which will dynamically scale the VMs up and down based on workload demand; and connects to existing, external database and user registry.

## ***Using layers***

This section will describe how layers can be used in the virtual application builder tool.

## Layer operations

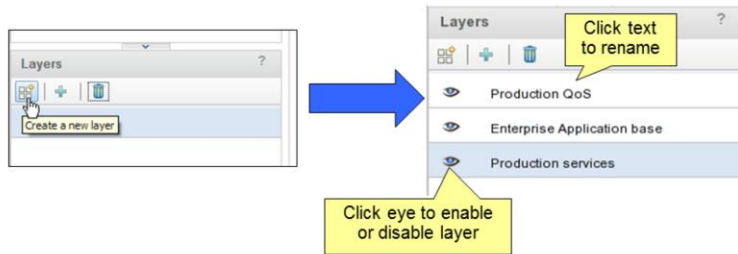
1. Create
  - Build a layer from scratch
2. Import
  - Import an existing virtual application as a layer
3. Delete
  - Delete an existing layer



The virtual application builder tool provides three layering options. You can create a layer from scratch, import an existing virtual application pattern and use that as a reference layer, and delete an existing layer.

## Create a layer

- Click create a new layer icon
- Provide a descriptive name for the new layer



Virtual application layers

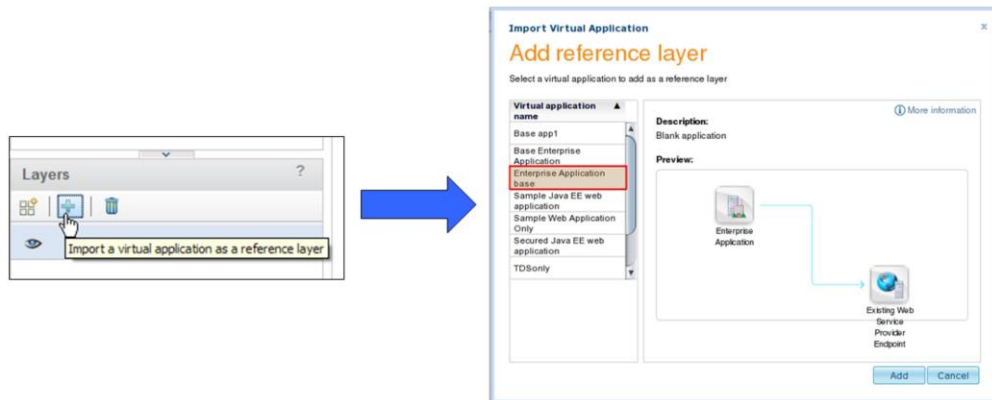
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The first step to create a layer is to click the “Create a new layer” icon. This will result in a new layer being created with a default name “layer”. You can then click the text of the layer and provide a descriptive name. At this point you have a layer by name only; it is not associated with any components, links or policies. Notice the eye icon located to the left of each layer, clicking this icon will toggle the layer on and off.



## Import an existing reference layer

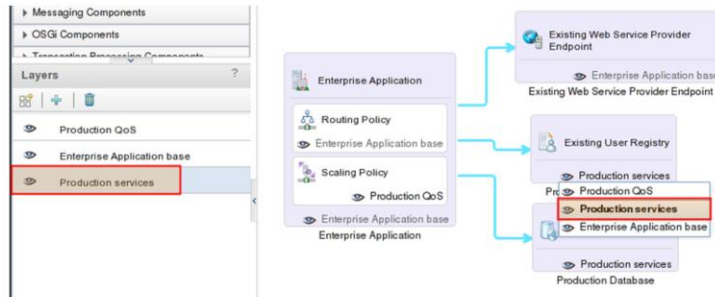
- Import an existing virtual application as a reference layer
  - Reference layers are read-only



To import a virtual application as a reference layer, click the blue plus sign icon. This will bring up a panel which allows you to choose which virtual application you want to reference. From initial appearances this type of layer looks no different than one created from scratch, but there is a key difference: this is a reference to an existing virtual application pattern. This layer is read-only. You can add additional layers on top, but you cannot modify the reference layer. If the referenced virtual application pattern changes then your reference layer changes.

## Component and policy layer assignment

- Components and policies can be assigned to a layer



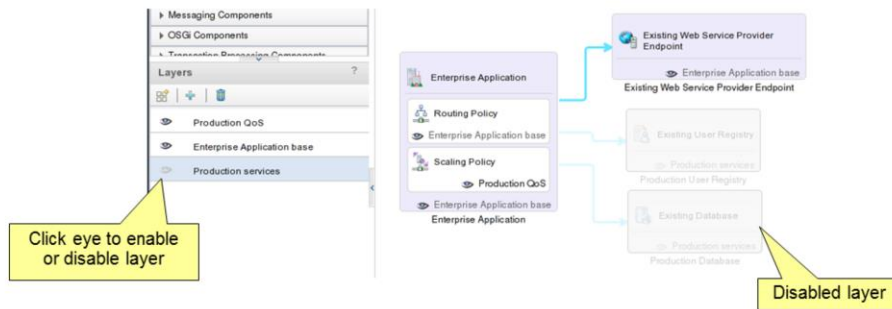
Virtual application layers

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To configure a layer you first need to have a baseline virtual application built. Second, assign each component and policy to the layer that you want. This can be done by clicking the Layer icon located at the bottom of each component and policy. Note, this layer icon does not exist if your virtual application contains only one layer.

## Enable and disable layers

- Enable and disable individual layers
- Cannot modify disabled layers



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Each layer can be enabled and disabled independently of the other layers. To enable or disable a layer click the layer icon under the Layers column on the left side of the screen. When a layer is disabled the icon and associated components, links and policies located in the canvas are not available.

Layers are defined and assigned at design time. What this means is that you must build out your virtual application including any layers and save before deployment.

Layers allow you to control the scope complexity of what is displayed and editable while editing an application pattern. Disabling a layer makes the items in the layer not editable. It does not impact deployment; all components, links, and policies in the pattern are deployed.

Section

## ***Summary***

This section will give a brief summary.

## Summary

- Layers allow you to incrementally build out a virtual application
- Allow you to control the complexity and reuse of virtual applications
- Constructed in the Virtual Application Builder tool

The key to understanding layers, is that layers are a way to incrementally build out a virtual application based on some predefined usage scenario. Layers allow you to take a single baseline structure and incrementally build upon it which results in reduced development time and consistent build outs.

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