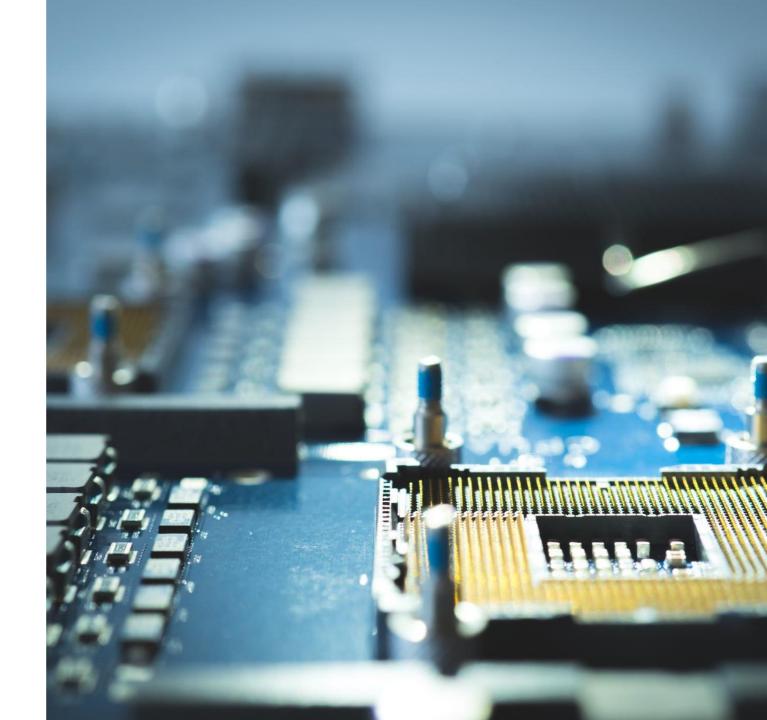


# WorkshopPLUS: SharePoint Server Administration

Planning patch management



# Agenda - Chapter 1

Patching Prerequisites
 Understand the Various Types of Patches
 Patching in SharePoint
 Patching Improvements

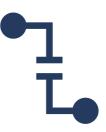
## **Required Permissions**



### **Required permissions**

securityadmin fixed SQL server role
db\_owner fixed database role on all
SharePoint databases
Local administrator on the SharePoint

servers



#### **Important conditions**

All web servers are load balanced and in rotation with the load balancer.

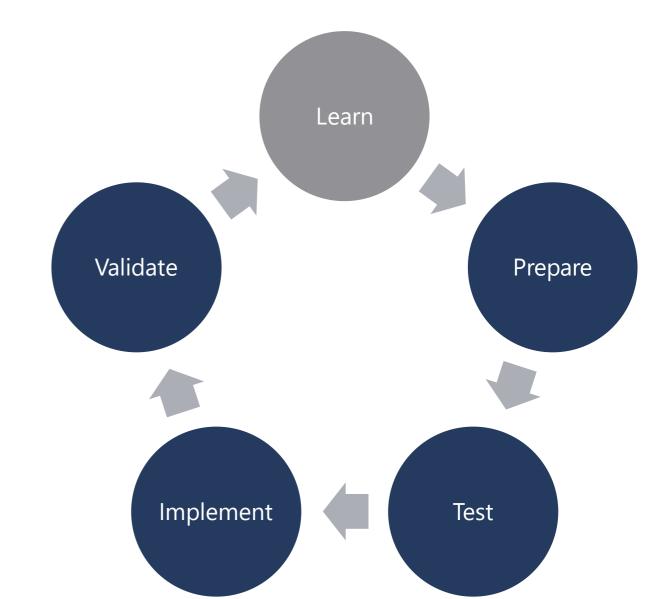
All farm servers are operating properly.

All databases are active and operating properly.

## Software Update Deployment Cycle\* - Learn

### Learn

- Requirements and prerequisites
- Update strategy
- Downtime reduction
- Common issues

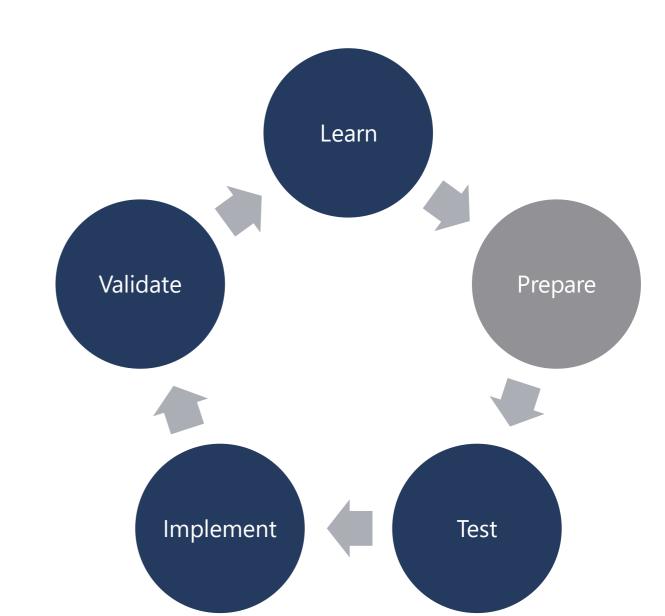


<sup>\*</sup>Applicable to any software installation.

## Software Update Deployment Cycle - Prepare

### Prepare

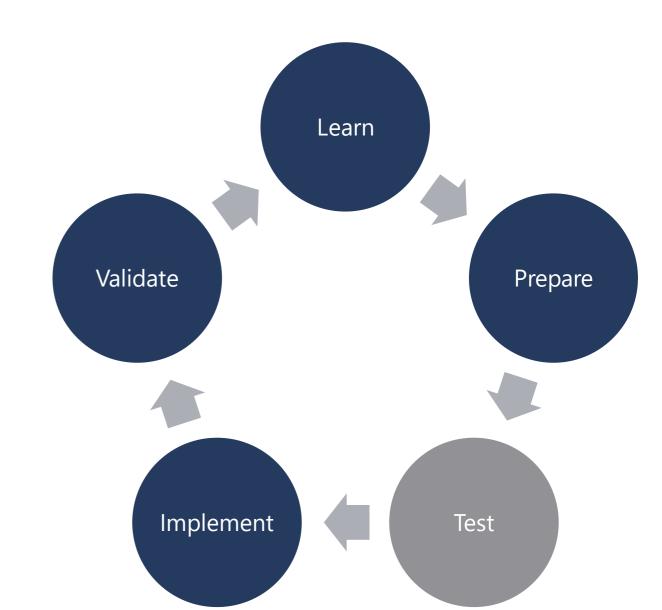
- Document the environment
- Manage Customizations
- Plan the Upgrade Strategy
- Make farm items ready for updates



## Software Update Deployment Cycle - Test

### Test

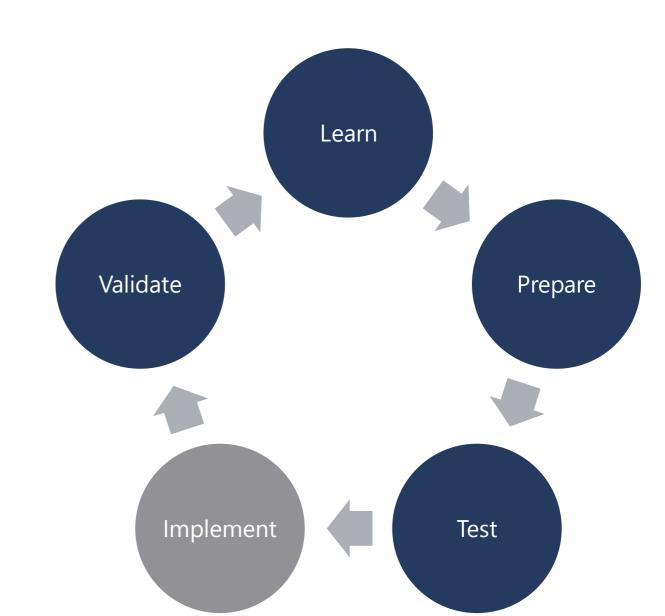
- Build a test farm
- Evaluate techniques



## Software Update Deployment Cycle - Implement

### **Implement**

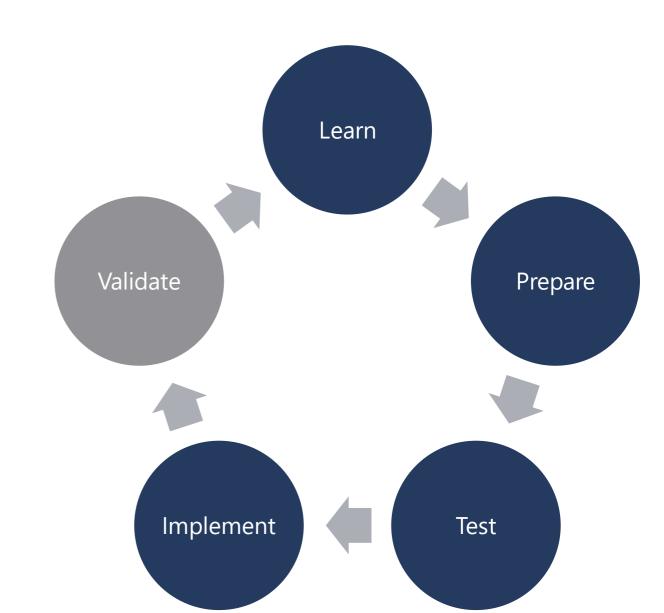
- Build or update farms
- Deploy customizations
- Reduce downtime
- Monitor progress



## Software Update Deployment Cycle - Validate

### Validate

- Logged event failures
- User interface or experience issues
- Data issues



# Agenda - Chapter 2

- 1 Patching Prerequisites
- 2 Understand the Various Types of Patches
- 3 Patching in SharePoint
- 4 Patching Improvements

# **Understanding Types of Patches - Updates**



Security Updates/Public Updates



**Cumulative Updates** 



Server/Uber Updates

### **Understanding Types of Patches - Packs**



#### **Service Packs**

A tested, cumulative set of all hotfixes, security updates, critical updates, and updates. Additionally, service packs may contain additional fixes for problems that are found internally since the release of the product.



#### **Language Packs**

Language packs enable site owners and site collection administrators to create SharePoint sites and site collections in multiple languages without requiring separate installations of SharePoint.



#### **Feature Packs**

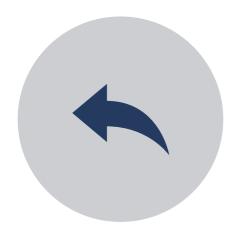
Feature Packs allow Microsoft to accelerate delivery of cloud-first features to our Software Assurance customers (where noted) of SharePoint Server outside of the traditional 2- to 3-year release cadence.

# Agenda - Chapter 3

- 1 Patching Prerequisites
- 2 Understand the Various Types of Patches
- 3 Patching in SharePoint
- 4 Patching Improvements

### Review of Patching In Previous SharePoint Versions

SharePoint Server 2010 vs SharePoint Server 2013







Run PSCONFIG on multiple servers



**Monitor status** 

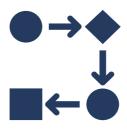
# **Updating Related Components - AppFabric**

AppFabric



#### **SharePoint Only**

SharePoint Updates do not update AppFabric or other components



#### **Procedure**

Shut down the service instance (Using PowerShell command)

Patch AppFabric 1.1 (with Cumulative Update)

Post-patch operations (may changes be applied on configuration files)

Start the service instance

## **Updating Related Components - Workflow**

Workflow

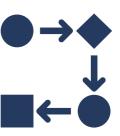




Workflow is handled by **Workflow Manager 1.0** which is dependent

on **Service Bus 1.0** 

You need to install Cumulative Updates for each product.



#### **Procedure**

Ensure you are logged in as the same admin account you used to install Workflow Manager 1.0.

Run PowerShell command **Register- SPWorkflowService –Force** to pair again with SharePoint.

## **Updating Related Components - Operating System**

**Operating System** 



Service Packs and Security Updates



.NET Framework



Internet
Information
Server (IIS)



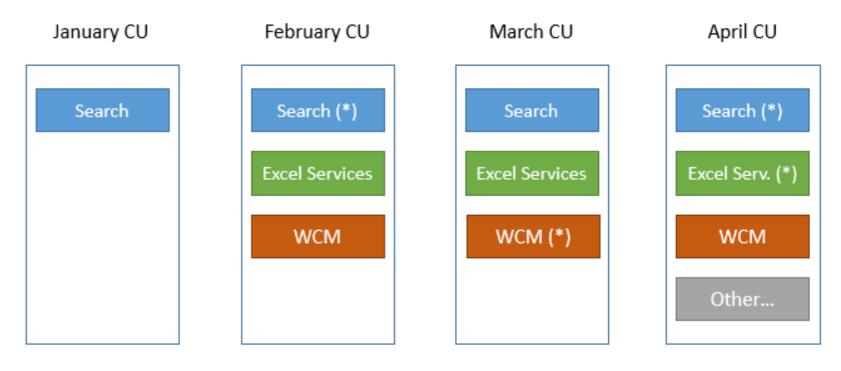
**Drivers** 



**Firmware** 

## Role of Uber Packages

- Also called a "full server" package
- Kind of a "mini-service pack"



Simplified Uber Package Model (\*) = fixes released in an earlier CU

# Agenda - Chapter 4

Patching Prerequisites
 Understand the Various Types of Patches
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 Patching Improvements

### **Zero-Downtime Patching**



More than one server per role to guarantee service availability

SharePoint Server MinRole can help with this.



Windows Services still have to be restarted



Databases are fully accessible during patching



Increased SQL utilization might affect performance

### **MSIs and MSPs**



Reduction in number of MSIs and MSPs for each patch



Patching Time will be much shorter

## **Knowledge Check**

What are the five steps of a software deployment process?

• Learn, Prepare, Test, Implement, Validate

Give some examples of types of patches:

• Security Updates, Cumulative Updates, Uber Updates, Feature Updates

**Questions?** 



