SharePoint 2016 –
New features and functionality (IT Pro 100)
Agenda

• Introduction
• SharePoint 2016 Basics (Preview)
• Some new features of SharePoint 2016 (Preview)
  • Access services
  • Fast site collection creation
  • Compliance features
  • Search
• Q & A
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Introduction

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SharePoint 2016 Basics (Preview)
## Hardware Requirements

<table>
<thead>
<tr>
<th></th>
<th>MEM</th>
<th>PROC</th>
<th>DISK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Single Server</strong></td>
<td>16-24</td>
<td>X64 1x4</td>
<td>80 GB</td>
</tr>
<tr>
<td><strong>Farm Server</strong></td>
<td>12-16</td>
<td>X64 1x4</td>
<td>80 GB</td>
</tr>
</tbody>
</table>
Prerequisites

**Windows Server 2012 R2**

**Windows Server 10**

**Prerequisites**

- Windows Management Framework 3.0
- Application Server Role
- Web Server (IIS) Role
- Microsoft .NET Framework 4.5.2
- Update for the .NET Framework 4 (KB2898850)
- Microsoft SQL Server 2012 Native Client
- Microsoft Identity Extensions
- Microsoft Sync Framework Runtime v1.0 SP1 (x64)
- Windows Server AppFabric 1.1
- Windows Identity Foundation v1.1
- Microsoft Information Protection and Control Client
- Microsoft WCF Data Services

**Provides support for Windows PowerShell 3.0**

**Provides in memory distributed caching**

**Enables the creation & consumption of OData services**

**.NET Framework 4.5.2**

**Provides support for information protection**
Software Requirements

Database Servers

64-bit edition of Microsoft SQL Server 2014 Service Pack 1

64-bit edition of SQL Server 201x
## Deployment Scenarios

<table>
<thead>
<tr>
<th></th>
<th>SharePoint 2013</th>
<th>SharePoint 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Workgroup</strong></td>
<td>Unsupported</td>
<td>Unsupported</td>
</tr>
<tr>
<td><strong>Domain Controller</strong></td>
<td>Developer</td>
<td>Developer</td>
</tr>
<tr>
<td><strong>Client OS</strong></td>
<td>Unsupported</td>
<td>Unsupported</td>
</tr>
<tr>
<td><strong>Dynamic Memory</strong></td>
<td>Unsupported</td>
<td>Unsupported</td>
</tr>
<tr>
<td><strong>Windows Web Server</strong></td>
<td>Unsupported</td>
<td>Unsupported</td>
</tr>
</tbody>
</table>
Roles & Services 2016

User services
- sync client
- onenote
- user profile
- page rendering
- excel services
- sandbox code
- project
- subscription settings

Robot services
- provisioning
- timer jobs
- search

Caching services
- caching

MinRole
SharePoint logic consolidated into one single machine reducing the number of discrete roles
## MinRole Roles and Services

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebFrontEnd</td>
<td>Services end user requests. Servers assigned to this role are optimized for low latency.</td>
</tr>
<tr>
<td>Application</td>
<td>Services backend jobs or the requests triggered by backend jobs. Servers assigned to this role are optimized for high throughput.</td>
</tr>
<tr>
<td>Specialized Load</td>
<td>Reserved for services that needed to be isolated from other services. 3rd party applications, etc.</td>
</tr>
<tr>
<td>DistributedCache</td>
<td>Serves distributed cache for the farm. Servers assigned to this role can load balance end user requests among the web front ends.</td>
</tr>
</tbody>
</table>
Specify Server Role

- Multiple Server Farm
  - Front End
  - Application
  - Distributed Cache
  - Search
  - Specialized Load
- Simple Server Farm
  - Simple Server

Role Description
- Service applications, services, and components that serve user requests directly are placed on front-end servers. These servers are optimized for fast performance.

German explanation example:
- Auf Front-End-Servern befinden sich Service-Anwendungen, Services und Komponenten, die Benutzeranforderungen direkt zu bearbeiten haben. Diese Server sind für schnelle Performance optimiert.
Role Enforcement and Health

- **SharePoint Health Analyzer for MinRole enforcement**
- Health rule will scan each server in the farm daily
- Scans all roles except for SpecialLoad
- Compares Service Instances on server to expected configuration
<table>
<thead>
<tr>
<th>Content Database Size</th>
<th>Site Collections per Content Database</th>
<th>List Threshold</th>
<th>MaxFile Size</th>
<th>Indexed Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content database sizing into TB’s</td>
<td>100,000 site collections per content database</td>
<td>Increased List Threshold &gt;5000</td>
<td>MaxFile Size increases to 10GB and removed character restrictions</td>
<td>2x increase in Search scale to 500 million items</td>
</tr>
</tbody>
</table>
Some new features
Access Services

Support apps for Office

Use an app for Office to integrate data from outside services in your Access app, such as reading stock prices. Apps for Office can also display the data in your Access app visually, such as on a map, in a chart, or in a graph.

Access App Upgrade

Download in Excel feature available for users to pivot Access tables

Cascading Combo box is now available in Access
Fast Site Creation

New Logic

- Copies Site Collections using SPSite.Copy at Content Database level
- Implements master copies of Site Collections
- Mitigates Feature Activation overhead

Implements site collection creation performance
Compliance

- Compliance across cloud and on-premises
- Identify, monitor & protect sensitive data through deep content analysis
- Discover and preserve with eDiscovery
- Investigate and prove with auditing
Search Service Application for cloud storage

Unifies on-premises and cloud indexes
Provides support for Office Graph/Delve experiences on-premises
Supports Search as a Service / reduces search crawl footprint
Expanded support for special characters

SharePoint has historically blocked file names that included the & , ~ , { , and } characters, file names that contained a GUID, file names with leading dots, and file names longer than 128 characters. These restrictions are removed in SharePoint Server 2016 and are now available to use.

Restricted characters such as % and # are still not allowed in file names.
Hybrid sites

Integrated experience while using SharePoint Server and SharePoint Online sites

Hybrid Features

Cloud hybrid search
Some more features
Central Administration

Provisioned on the first server in a farm by default when using the SharePoint Products Configuration Wizard

Central Administration is not provisioned on additional servers in a farm by default
Durable Links

Resource Id based URLs
Url remains intact with rename and move
Enables discrete URL on visibility

User clicks docID-based durable URL

Redirect manager: based on this docID, provide the right way to get a doc

Cobalt endpoint for getting file for client
URL with SiteID & DocID to WOPI
GuestAccess.aspx URL for WOPI
In either scenario the link will return the original document based on the resource Id assigned to the document (w6143f2e64bb84649aef201322eacd269).
Integrated Project Server
Controlled through server/user licensing
User Profile Service

Improved bidirectional synchronization
Removed built-in FIM Service
Supports external FIM Service

Unidirectional synchronization provided through native AD synchronization
In Summary

SharePoint Server 2016 is:

• a comprehensive solution for connected information work
• that preserves structured processes, compliance, IT investment
• optimized for the way people work
• through an easily-managed and integrated platform
Thank you!