

# WHAT'S NEW IN MICROSOFT SERVER PLATFORMS

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#ILTAG84





# SPEAKERS

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**Nilesh Mehta**

CEO

NGenious Solutions Inc.



**Patrick Sklodowski**

Principal

Square10 Solutions



# AGENDA

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- Introductions
- We're Talking About Upgrades!
  - Again?
- Let's focus on Hybrid Cloud
- Technologies:
  - Windows Server 2016
  - SQL Server 2016
  - SharePoint 2016
  - Exchange 2016
  - Office 365
  - Azure
- Q&A



# MICROSOFT'S MISSION

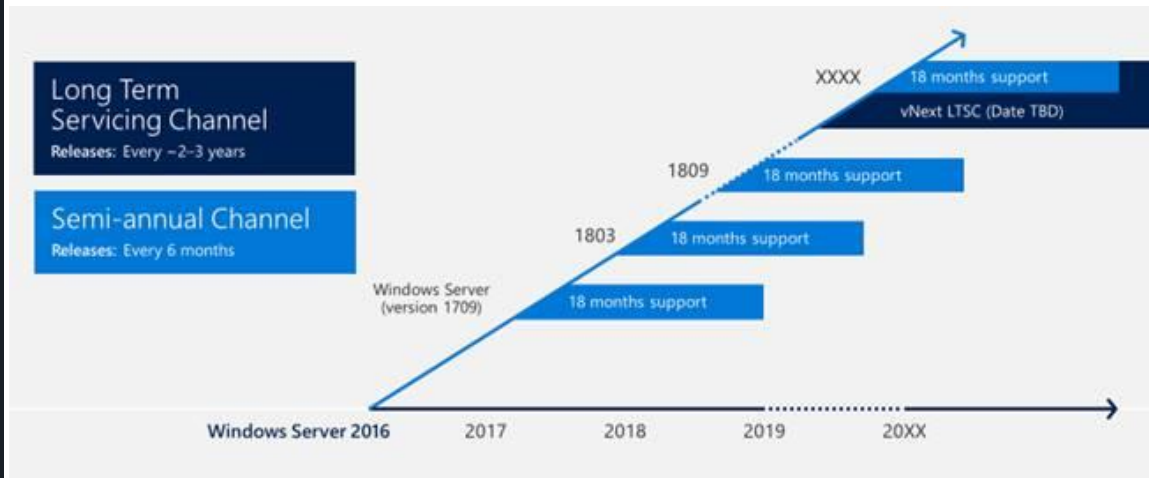
- Cloud first, Mobile first
  - “Empower people, teams and organizations to intelligently discover, share and collaborate on content from anywhere and on any device.”
  - “We are continuing to advance SharePoint, OneDrive and the entire Office 365 service in ways that make productivity even more collaborative, intelligent, mobile and trustworthy.”
  - “Customers need choice, they want to adopt cloud technology on their terms.”  
—Satya Nadella



**WINDOWS SERVER 2016**

# Windows Server 2016

- New update schedule
  - Long-term Servicing Channel – Major release
  - Semi-annual Channel
    - For customers moving at a “cloud cadence”
    - 18 months of support, **must maintain upgrade cadence**
    - Requires Software Assurance or as part of Azure Marketplace





# WINDOWS SERVER 2016 IMPROVEMENTS

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- Many enhancements not critical in Legal (today)
  - Containers, nested virtualization, Docker support
- Hyper-V
  - Shielded virtual machines (improvements)
  - Hot add & remove of virtual memory & network adapters
  - Rolling upgrades for Hyper-V (and Storage clusters)
- Azure MFA Integration
  - Native ADFS and Network Policy Server Extension
  - Expect deprecation of MFA Server
- Storage Replica
- Hyper convergence / Software Defined
  - Network
  - Storage Spaces Direct
- Security Improvements
  - Nano Server
  - Privileged Identity Management
  - Just Enough Administration
  - Shielded virtual machines
  - Windows Defender
  - “Headless” Windows Defender



# AZURE STACK

## Microsoft Azure Stack Architecture

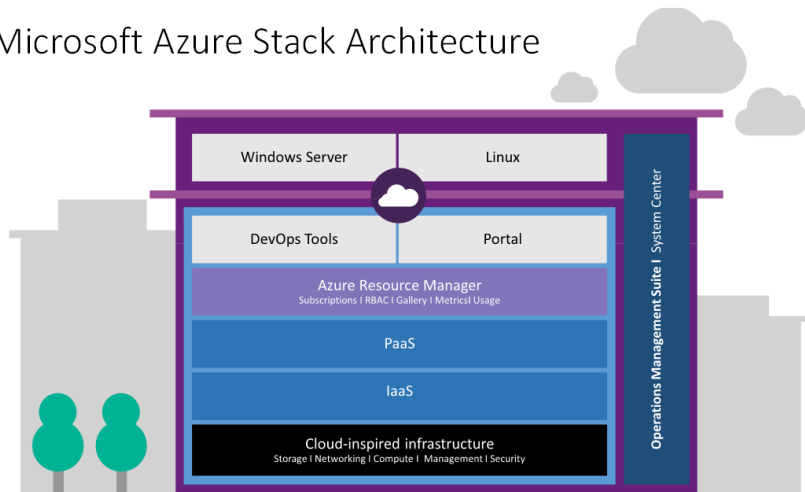


Image courtesy of Microsoft

- “Cloud in a box”
  - Pre-built, integrated, systems
- Pay as you go and capacity pricing models
- Competition from other hyper converged solutions (Nutanix, VMware, Simplivity, Cisco, NetApp)
- Adoption in Legal (*prediction*)
  - Low adoption for 2-4 years
  - Long term is dependent on hyper converged market (competition, consolidation, etc.)
  - Traditional / converged solutions are not going away





# BENEFITS OF MICROSOFT HYBRID CLOUD

## Platform

- Scale to cloud
- Leverage existing investments
- Consistent Disaster Recovery
- Manage your data center infrastructure and platform “as a Service”

## Management

- Unified management
- Identical IT and developer skill sets
- Minimize complexity and risk
- Single vendor support

## Identity

- Account synchronization - Azure AD Connect
- Common identity through Azure AD and on premise Active Directory
- Manage identity lifecycle for internal and external applications
- Secure access to internal and external applications

## Security & Operations

- Analytics driven with immediate insight
- Detect and respond to threats across all assets
- Operations Management Suite (OMS)

# SQL SERVER 2016



# SQL SERVER 2016

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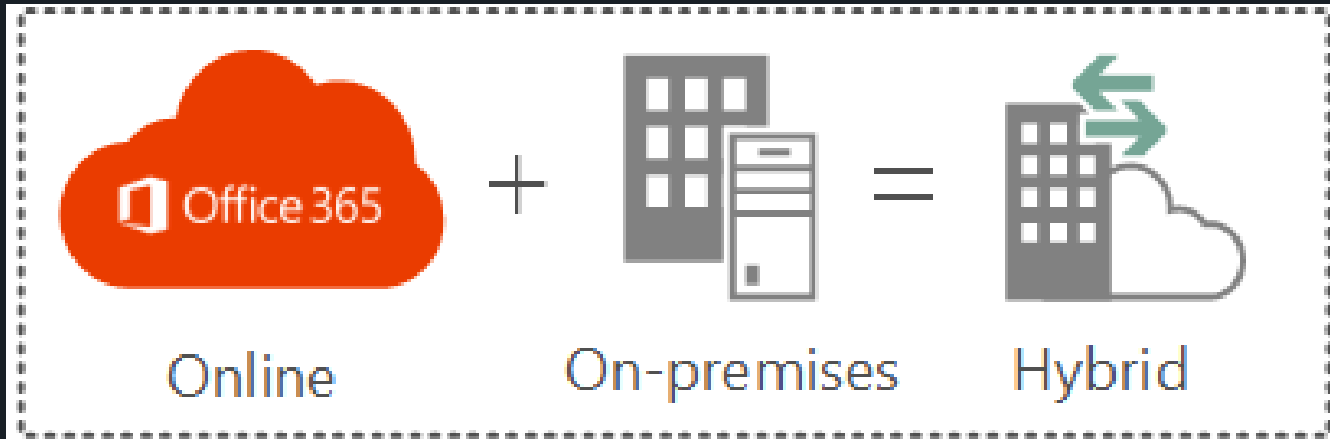
- Always Encrypted
- Multiple TempDB files
  - Option to automatically create
- Stretch database (to Azure)
- Linux Support (SQL 2017)
- SQL Always On
  - Not new but underutilized!
- Replication to Azure for HA / DR
  - Requires using Azure as IaaS and extending Active Directory Domain
  - Generally assumes Azure is your DR site

**SHAREPOINT 2016**



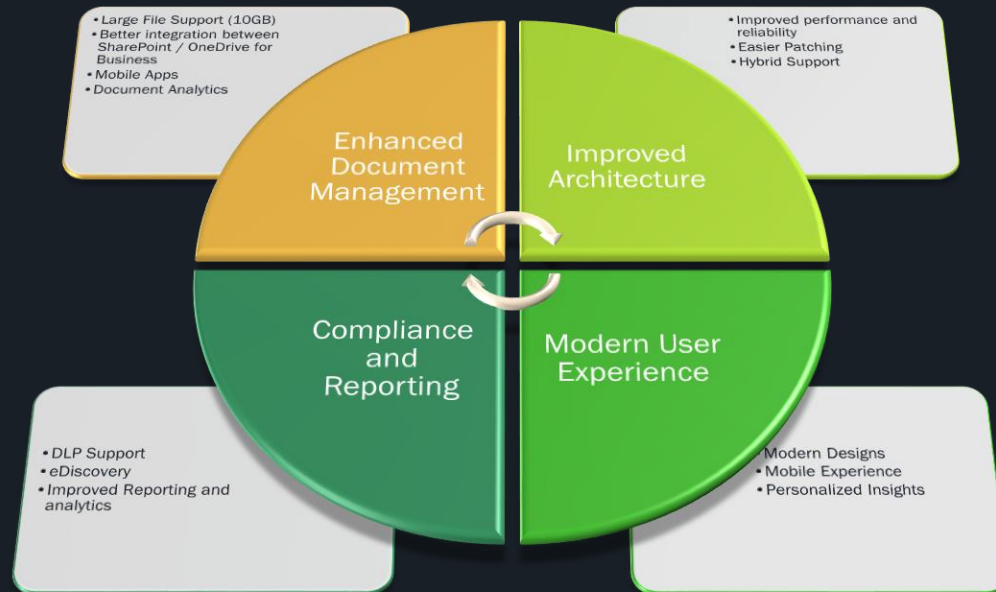
# SHAREPOINT DEPLOYMENT OPTIONS

- On-premises (Internal Datacenter or 3<sup>rd</sup> Party hosting provider)
- Online (Office 365)
- Hybrid Implementation





# SHAREPOINT 2016 BENEFITS





# SHAREPOINT ONLINE BENEFITS

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Modern document library experience  
(Office 365 only, at this point)

SharePoint mobile app for iOS, Android and Windows

SharePoint home in Office 365

Modern lists experience

Site activity and insights on the Site Contents page

Integration of SharePoint sites and Office 365 Groups

Simple, fast site creation

Modern pages experience

Team and organizational news and announcements

PowerApps and Microsoft Flow integration with SharePoint



# SHAREPOINT HYBRID BENEFITS

## Hybrid Search

- With the Cloud Search Service Application, customers can now crawl their on-premises SharePoint content as well as file shares and have that content pushed into the SharePoint Online search index along with the SharePoint Online content.

## Set Up

- The improved ease of configuration for hybrid is a great feature in SharePoint 2016. It's gone from a process that's challenging even for seasoned consultants, to being a largely automatic experience.

## Hybrid OneDrive for Business

- Whether in SharePoint 2016 or SharePoint Online, when users click on the OneDrive or Sites links in the navigation bar, they'll be redirected to the Office 365 experience.

## Hybrid App Launcher

- If Hybrid Team Sites or Hybrid OneDrive for Business have been configured, the relevant tiles in the Hybrid App Launcher will link to the appropriate location (on-premises or online).

## Hybrid Team Sites

- This encompasses a couple of experiences. First, if users "follow" sites in both Office 365 and on-premises, the list of followed sites will be compiled and available in their Office 365 profile. It also provides redirection to Office 365 when clicking on your profile to display your Delve-driven profile page, if configured.



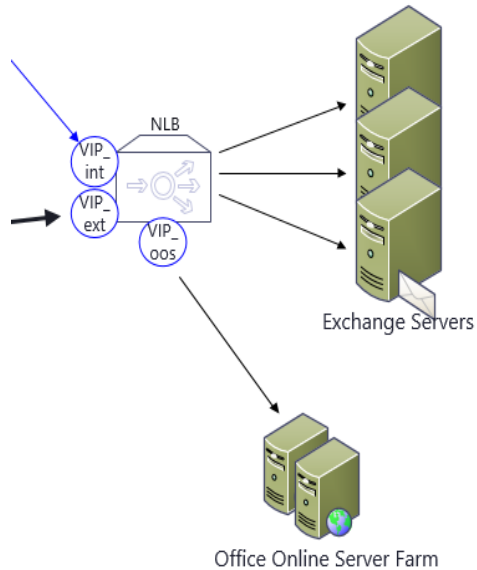
**EXCHANGE 2016**



# EXCHANGE 2016

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- Mailbox role only
  - No more Windows load balancing
- Preferred (Reference) architecture
  - Understand the rationale, design for you
- Database Availability Group (DAG) improvements
  - True cross site availability
  - Namespace design
- Office Online Server
  - Required for attachment review and editing
- Public folders
  - They're back!
- Co-existence with previous versions
  - Be up to date
  - Thoroughly test
  - See resources in appendix for some known challenges



# COMMUNICATION

- What's still underutilized?
  - In-place archive
  - Litigation holds
  - Digital Loss Prevention
    - Understand how corroborative information affects results
  - Kerberos authentication
  - ADFS authentication for OWA and ECP
    - Correct way to implement Microsoft MFA

Exchange 2016 Production Protocol Flow			CONFIDENTIAL
1.2	ENGINEER	Patryk Skłodowski	DATE June 19, 2017



# EXCHANGE HYBRID MODE

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Single (common)  
email  
namespace

Unified Global  
Address List

Free / Busy  
sharing

Secure mail  
routing within the  
organization

Centralized mail  
flow

Bidirectional  
mailbox moves

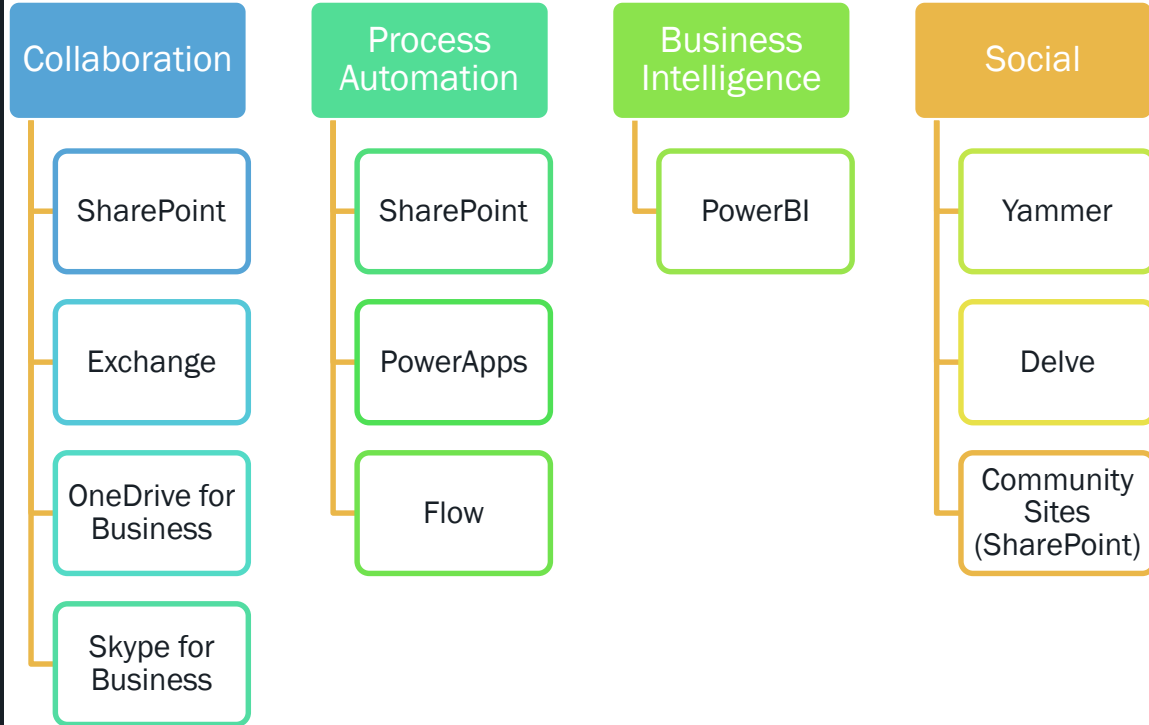
Delegate mailbox  
access (Full  
Access only)

**OFFICE 365 / AZURE**

# OFFICE 365

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## One Stop Shop for all business needs



# OFFICE 365 SECURITY AND COMPLIANCE

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Office 365  
Security and  
Compliance  
Center

Office 365 Import  
Service

Anti-Spam and  
Anti-Malware  
Protection in  
Office 365

Archiving

Auditing

Data Loss  
Prevention

eDiscovery

Encryption

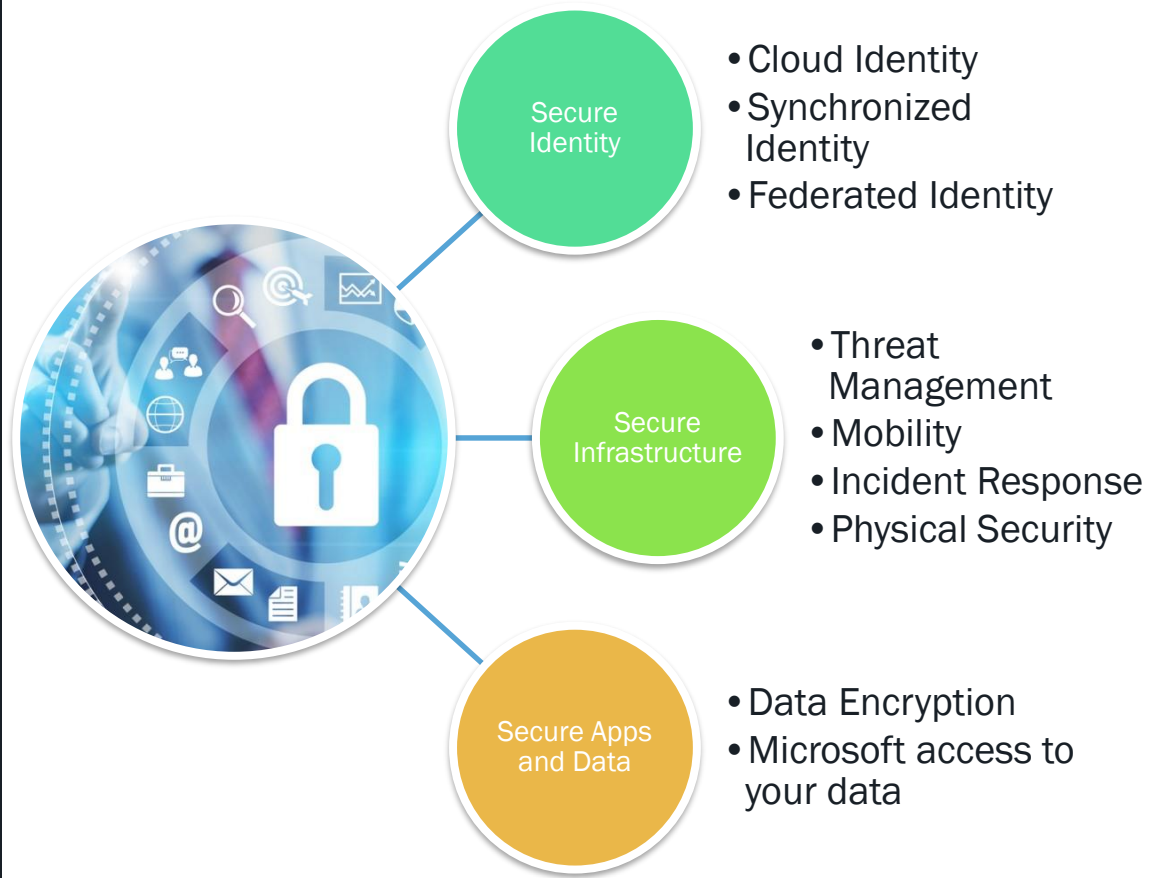
Legal Hold

Information  
Management  
Policies

Information  
Rights  
Management

# MICROSOFT TRUST CENTER

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# AZURE

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- Know your Roadmap
- Use the things you already own!
- Places to start:

## Cloud SSO and Identity Management

- Azure AD
- Sync your accounts now!

## Azure AD Proxy

- Inbound connections through a secure proxy

## Azure MFA

- Multi factor authentication

## Azure DNS

- DNS Hosting

## Traffic Manager

- Global Services
- Load Balancing

## Azure Backup

- System backups

## Azure Recovery

- Disaster Recovery

## Azure IaaS

- Lab / Warm site

Q&A

# **SPEAKER BIOS**



# PATRICK SKLODOWSKI

Principal

Square10 Solutions

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Patrick, a Principal with Square10 Solutions, is a proven technology professional with over two decades of experience. He works with clients to providing strategic and business direction while ensuring successful delivery of projects to a unique blend of large enterprises, mid and small-sized firms.

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Patrick's areas of specialty include system architecture, delivery of cloud solutions, messaging, technical project management, disaster recovery, virtual desktop, and complex migrations. Patrick is regularly invited to present on such topics as technology trends, messaging and retention, storage, cloud computing, mobile and disaster recovery.





# NILESH MEHTA

CEO

NGenious Solutions Inc.

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Niles Mehta, Founder and CEO of NGenious Solutions Inc., is an MS (Computer Science) graduate from New Jersey Institute of Technology, Newark, NJ with close to 20 years of experience working with enterprise organizations.

Recognized not only as an Enterprise Architect across various Microsoft technologies but also as an accessible, forward-thinking and solutions-oriented leader, Niles believes in achieving exceptional results in highly competitive environments. Niles drives NGenious Solutions as a key motivator, mentor who leads talented professionals. He lives the culture and leads by example. Niles is very well known in the industry for his experience in developing enterprise solutions using Microsoft technologies and has also been awarded the Microsoft P-TSP status for the past 5 years. A Virtual Technology Solutions Professional (V-TSP) is an employee of a Microsoft Partner who is acting as an extension of the Microsoft team in the capacity of pre-sales technical support. As a V-TSP, he has the ability to position, demonstrate, design and implement Microsoft solutions.

As Founder and Chairman of the New York SharePoint User Group, Niles is also well known to help contribute back to the SharePoint community. His clear focus on Microsoft's technologies inspired him to co-author a book on SharePoint: SharePoint 2007 - The definite guide with O'Reilly.

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[www.ngenioussolutions.com](http://www.ngenioussolutions.com)



# RESOURCES



# PRODUCT VERSION SUPPORT DETAILS

Product	Lifecycle Start Date	Mainstream Support End Date	Extended Support End Date	Service Pack Support End Date
Exchange 2010 SP3	02/12/13	01/13/15	01/14/20	
Exchange 2013	01/09/13	04/10/18	04/11/23	
Exchange 2016	10/01/15	10/13/20	10/14/25	
SharePoint 2007	01/27/07	10/09/12	10/10/17	01/13/09
SharePoint 2010	07/15/10	10/13/15	10/13/20	07/10/12
SharePoint 2013	01/09/13	04/10/18	04/11/23	04/14/15
SQL Server 2012 SP3	05/20/12	07/11/17	07/12/22	
SQL Server 2014 SP2	07/14/16	07/09/19	07/09/24	
SQL Server 2016	06/01/16	N/A	N/A	01/09/18
Windows Server 2008 R2	02/22/11	01/13/15	01/14/20	
Windows Server 2012	10/30/12	10/09/18	10/10/23	
Windows Server 2012 R2	11/25/13	10/09/18	10/10/23	
Windows Server 2016	10/15/16	01/11/22	01/11/27	



# RESOURCES

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## Windows Server 2016

- Windows Server Semi-annual Channel Overview
  - <https://blogs.technet.microsoft.com/hybridcloud/2017/06/15/delivering-continuous-innovation-with-windows-server/>
  - <https://docs.microsoft.com/en-us/windows-server/get-started/semi-annual-channel-overview>
- Storage Spaces Direct in 5 minutes
  - <https://youtu.be/raeUiNtMkOE>
  - <https://docs.microsoft.com/en-us/windows-server/storage/storage-spaces/storage-spaces-direct-overview>

## SQL Server

- High availability and disaster recovery for SQL Server in Azure Virtual Machines
  - <https://docs.microsoft.com/en-us/azure/virtual-machines/windows/sql/virtual-machines-windows-sql-high-availability-dr>





# RESOURCES

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## Exchange

- Preferred (Reference) architecture
  - <https://blogs.technet.microsoft.com/exchange/2015/10/12/the-exchange-2016-preferred-architecture/>
- Proactive changes before setting up coexistence
  - Back links
    - [https://blogs.technet.microsoft.com/tips\\_from\\_the\\_inside/2012/01/11/autodiscover-fails-for-one-or-more-users/](https://blogs.technet.microsoft.com/tips_from_the_inside/2012/01/11/autodiscover-fails-for-one-or-more-users/)
  - MaxFieldLength and MaxRequestBytes
    - <https://support.microsoft.com/en-us/help/2988444/-http-400-bad-request-error-when-proxying-http-requests-from-an-exchan>
  - Application pool
    - <https://jhmeier.com/2016/03/14/exchange-2016-and-2010-coexistenceoutlook-shows-login-prompt/>



# RESOURCES

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## Azure

- Azure Roadmap
  - <https://azure.microsoft.com/en-us/roadmap/>
- Azure Trust Center
  - <https://azure.microsoft.com/en-us/support/trust-center/>

## Office 365

- Microsoft Trust Center
  - <https://www.microsoft.com/en-us/trustcenter/cloudservices/office365>