#### Windows Server 2012



#### Windows Server® 2012 Essentials

Product Overview & Deployment Planning

Part 1 of 6





### Agenda

Introduction

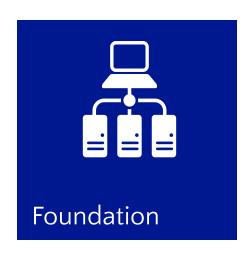
Features Overview

Planning and Deployment Scenarios

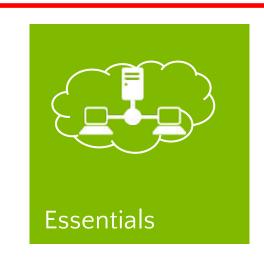
System Requirements

Resources

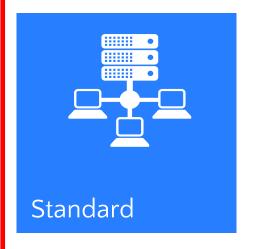
#### Windows Server 2012 Editions



- Per Server Licensing
- Limited to 1 processor only
- Up to 15 users, no CALs
- Cannot be virtualized and cannot be used at a virtualization host
- Basic workloads for core IT capabilities: file sharing, printer sharing and remote access



- Per Server Licensing
- Up to max of 2 processors
- Up to 25 users, no CALs
- Can be virtualized, but cannot be used as a virtualization host
- Ideal for small businesses: protect data, organize and access business information and access cloud services



- Processor & CALs
- Up to 2 processors per license; no processor limit
- Virtual Use Rights: 2 Instances
- Unlimited users with CALs
- All server features including: continuous availability, storage, management, networking, identity and access (parity with Datacenter)



- Processor & CALs
- Up to 2 processors per license; no processor limit
- Unlimited Virtual Instances
- Unlimited users with CALs
- Full product features
- High Density
   Virtualization for private and
   hybrid cloud environments

#### Windows Server 2012 Essentials

## Protect your data

Simplified backups. Enjoy peace of mind with daily, automatic backup.

Built-in disaster recovery. Microsoft's optional online backup service helps you safe.

**Centralized IT management.** Save time by managing your devices with the Dashboard.

# Promote a flexible work style

Consistent productivity. Quickly connect to the computers in your network.

**Easy connectivity.** Stay connected to the tools you use most.

**Increased security.** Stay productive by protecting your computers against security threats.

## Simplify your path to the cloud

Business agility. Increase productivity and collaborate with customers, vendors & partners.

Flexible cloud solutions. Enjoy the flexibility to choose the right solution for your needs.

Powerful partnership. Microsoft provides a variety of collaboration options.

#### What Is Windows Server 2012 Essentials?



Windows Server 2012 operating system



Turn Windows Server features into a solution



Install unique capabilities for small business

Active Directory, File & Print Server, Application Server, Networking, IIS, RDS, Backup Automatically install roles and features, configured according to best practices for small businesses

Dashboard, Client PC Backup,
Health Monitoring,
Remote Web Access, Email
Integration, Win7/8 Pro Pack,
Win8 Client App,
Windows Phone App

#### What's New?

Email via Office 365, Hosted, or on-premises Exchange Server	Maximum supported devices has been increased to 50	Windows Azure Online Backup	Storage Spaces	Remote domain join
Support for single server DirectAccess topology	Ability to monitor remote connections	Enhanced Dashboard Home page	<i>My Server</i> Win8 style UI client app	Windows 8 File History integration
Group Policy integration for client security settings	Touchable RWA	<i>My Server</i> Updated Windows Phone app	Enhanced SDK and new Web Services platform	NIC Teaming
Support for running Connector software on servers running Windows Server 2008 R2 and later	Improved application compatibility	Improved support for hosted environments	Grow to Windows Server 2012 Standard	Hyper-V Replica

#### Why Windows Server 2012 Essentials?



## Data protection

Enjoy peace of mind with daily, automatic, backups of every computer on your network and the Windows Server 2012 Essentials server itself.



## Anywhere access

Quickly connect to the server and computers in your network to access all your files, even run applications, from virtually any location just as if you were sitting in your office.



## Email integration

Enjoy the flexibility to choose the hybrid solution that fits best your business' needs, with seamless integration of cloud services and on-premises applications.



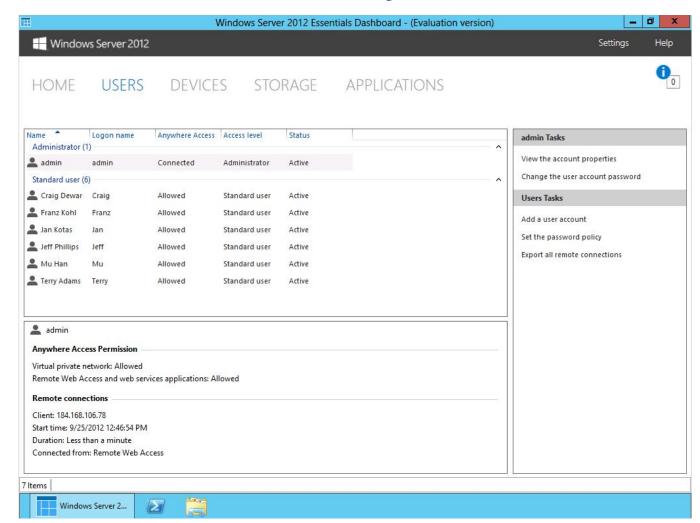
# Core IT improvements

Quickly identify the tasks that need to be completed when first starting the server with a redesigned homepage that, after initial setup, provides you with clear, actionable status information on the servers, network and PC's.



## User Management and Identity

- Uses Active Directory for authentication and authorization
- User accounts can be created as Standard or Administrator
- Password Policy
- Integrated mailbox management with cloud or on-prem messaging
- Built-in "Administrator" account is disabled

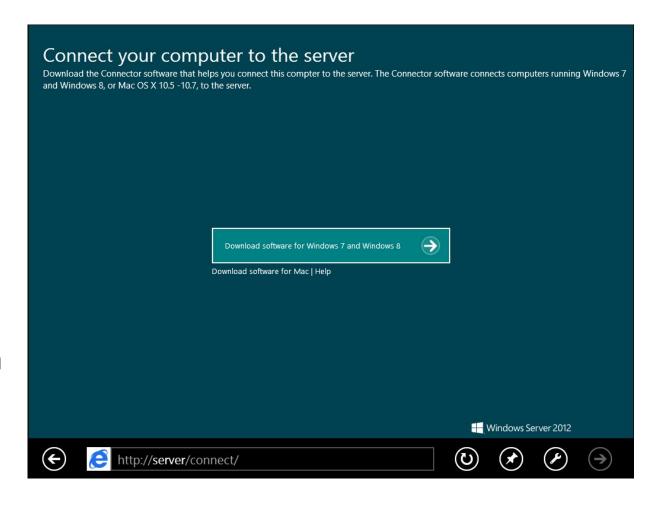


## Connecting Clients

Connection to Windows Server 2012 Essentials can be done by the end user

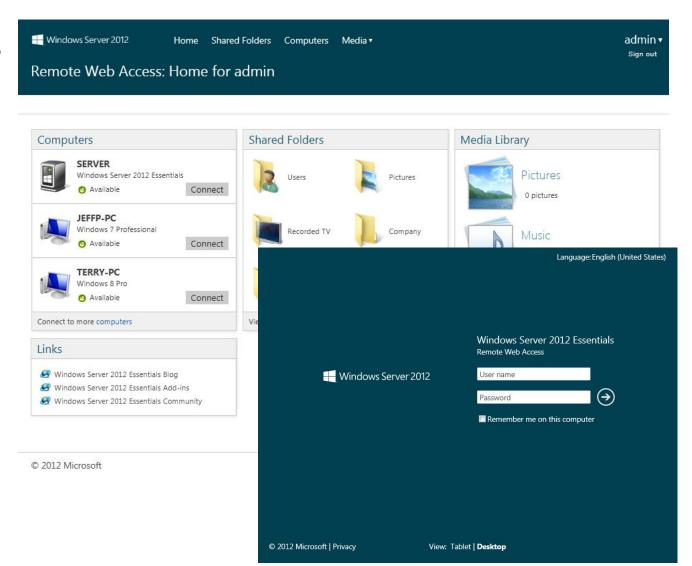
using a web page

- Can join when locally connected to the network or from a remote location
- .NET Framework is installed (if necessary)
- Users enter their credentials to connect
- Option to move existing local settings and data\*
- Ability to provide a computer description
- Option to enable computer to wake up for client backups



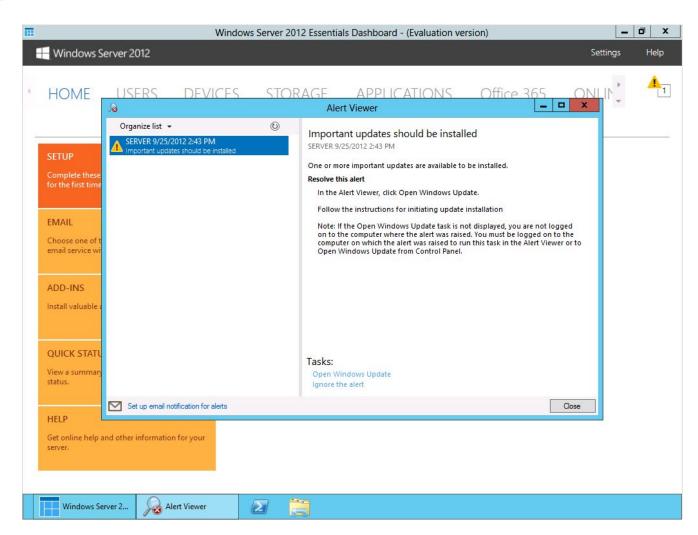
#### Remote Web Access

- Remote access to shared folders
- Remote access to computers and the applications running on them
- Remote access to the Dashboard or the server desktop to perform administration tasks
- Ability for users to remotely change their passwords



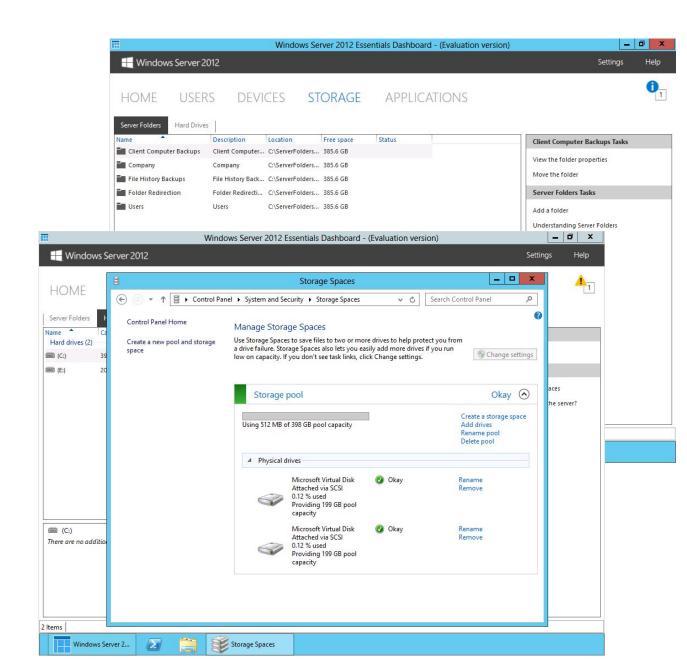
## Health Monitoring and Alerts

- Helps customers and partners monitor the security status of the network
  - Send alert notifications to customer and/or partner
- 3 severity levels (informational, warning, critical)
- Alerts include proscriptive guidance for resolution
- Many alerts include active links
- New Health Report Add-in



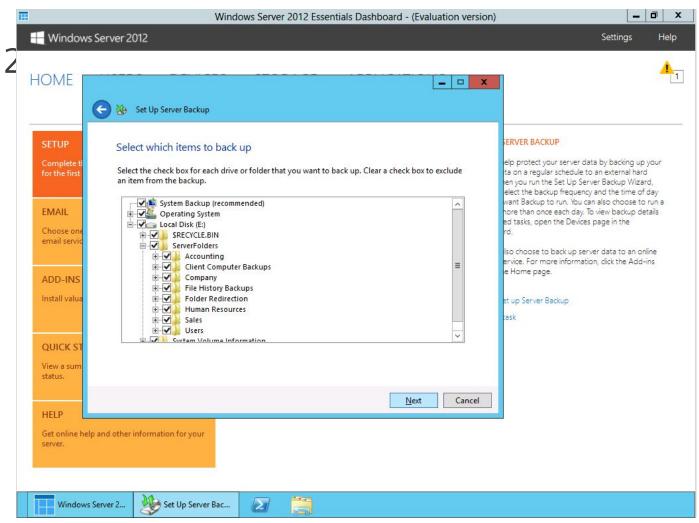
#### Storage

- The same Windows Server 2012 storage system
- Supports various storage configurations:
  - Individual physical disks
  - Storage Spaces and virtual disks
  - Hardware RAID
- Move Shared Folder wizard to simplify migrating data and permissions between disks



### Server Backup

- The same Windows Server 2012 Backup feature
- Supports volumes > 2 TB
- Key scenarios:
  - Single File Restore
  - Folder Restore
  - Server Bare Metal Recovery
  - Client Backup/Restore
  - Factory Reset (for headless)



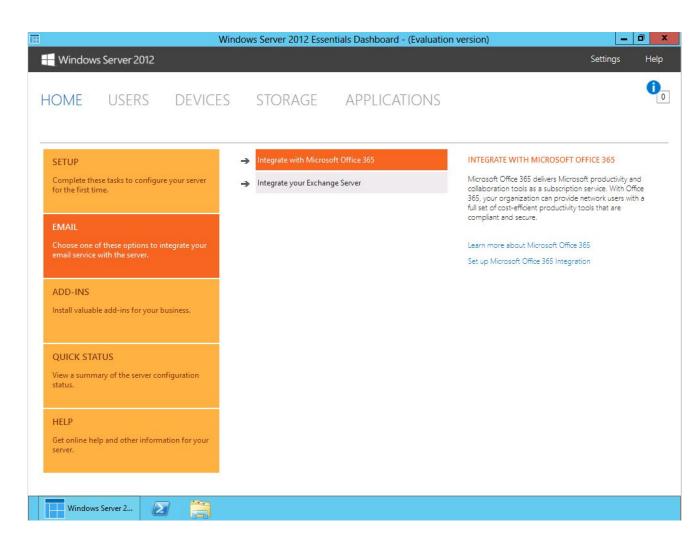
### Client Computer Backup

- Automatically backup all computers on a nightly basis
- File and folder restore wizard
- Recover full system and data (bare metal restore) of backed up client computers to similar hardware
- VSS writer for backup and restore of client backup database



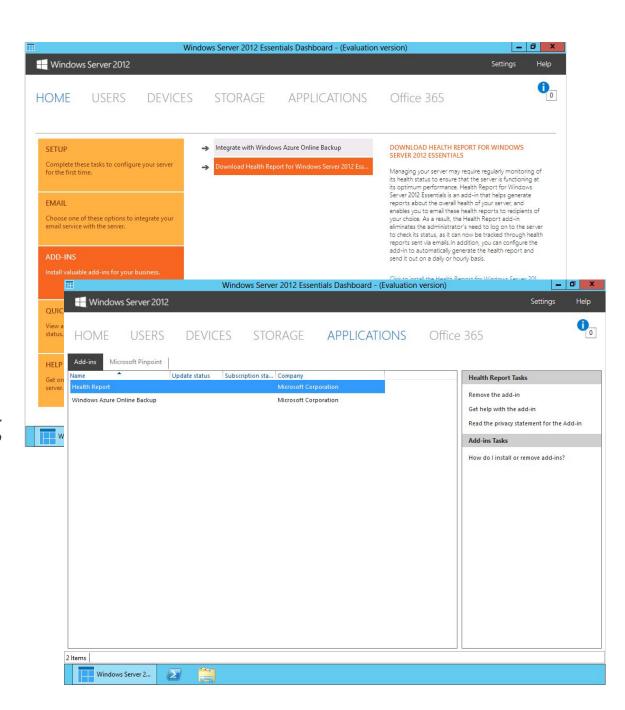
## Email Integration

- Flexibility to choose the desired messaging solution:
  - Office 365
  - On-prem Exchange Server
  - Hosted Exchanged
- All options provide integrated mailbox management



## Extensibility

- Rich Software Development Kit (SDK)
- Add-ins
  - Functionality that extends the product to add end user features, administrative features, or both
  - Support for OEM pre-installation during factory imaging
  - Can be cloud-based or on-premise apps
- Add-in Manager
  - A centralized location to manage add-ins



#### Mac Support

- Support for Macintosh OS X version 10.5 to 10.8
- Client Connector, Dashboard, Launchpad (including health alerts)
- Macs appear on the Computers page of the Dashboard
- Can use server as Time Machine backup destination
- Mac client-side support for add-ins
- Mac and iPhone support for Remote Web Access



## Typical First Server Deployment

- Replacement for peer-to-peer networking and PC-as-a-server
- Most often deployed pre-installed
- Physical hardware
- Apps running on the server
- Messaging & collaboration in the cloud
- Other cloud-based apps & services



#### Deploying using Virtualization

Windows Server 2012 Standard includes downgrade rights to run Essentials

Windows Server
2012 Standard
running Hyper-V
provides up to two
virtual instances
with a single license





Virtual instance running
Windows Server 2012
Standard

 Can be used for additional workloads, such as Exchange Server, SharePoint, WSUS, SQL Server, Remote Desktop Services, etc.

#### Growing Beyond 25 User Accounts

Businesses that grow beyond 25 users can perform an in-place license transition to Windows Server 2012 Standard Essentials value-add features remain, with a maximum supportability limit of 75 users and devices

Windows Server 2012 Standard licensing would then apply, including the use of the CAL licensing model

The value-add features can be removed entirely for businesses that grow larger than 75 users

## Migration Guidance

#### TechNet Migration Documentation Learn more about migrating to Windows Server 2012 Essentials at http://technet.microsoft.com/en-us/library/jj200183.aspx Migrate Windows Small Business Server 2003 to Windows Server 2012 Essentials http://technet.microsoft.com/en-us/library/ji200112.aspx Migrate Windows Small Business Server 2008 to Windows Server 2012 Essentials http://technet.microsoft.com/en-us/library/jj200141.aspx Migrate Windows SBS 2011 Essentials to Windows Server 2012 Essentials http://technet.microsoft.com/en-us/library/jj721737.aspx Migrate Windows SBS 2011 Standard to Windows Server 2012 Essentials http://technet.microsoft.com/en-us/library/jj721754.aspx Transition from Windows Server 2012 Essentials to Windows Server 2012 Standard

http://technet.microsoft.com/en-us/library/jj247582.aspx



#### System Requirements

Windows Server 2012 Essentials				
Component	Minimum	Recommended		
Processor/ CPU socket	1.4 GHz (64-bit processor) or faster for single core, or 1.3 GHz (64-bit processor) or faster for multi-core	3.1 GHz (64-bit processor) or faster multi-core		
Memory (RAM)	2 GB	8 GB		
Hard drive	160 GB hard disk with a 60 GB system partition			
http://tochpot	microsoft com/library/ii200132 asr			

http://technet.microsoft.com/library/jj200132.aspx

## Additional Requirements

Component	Description	
Network adapter	Gigabit Ethernet adapter (10/100/1000baseT PHY/MAC)	
Internet	Some functionality may require Internet access (fees may apply) or a Windows Live® ID Account	
Supported Client operating systems	Windows 8, Windows 7, Macintosh OS X version 10.5 to 10.8	
Router	A router or firewall that supports IPv4 NAT	
Additional requirements	<ul> <li>Super-VGA 800 x 600 (minimum) or 1024 × 768 (recommended) or higher-resolution monitor (headed mode only)</li> <li>Keyboard and Microsoft® Mouse or compatible pointing device (headed mode only)</li> <li>DVD-ROM drive</li> </ul>	
Supported networking configuration	<ul> <li>Your server must be connected via a network cable to a router</li> <li>The router should be a UPnP-certified device, but it is not required</li> <li>The router should be in the 192.168.x.x subnet, but it is not required</li> </ul>	

#### Resources



#### Product Page

Learn more about Windows Server 2012 Essentials at <a href="http://microsoft.com/essentials2012">http://microsoft.com/essentials2012</a>



#### TechNet TechCenter

Discover more technical information at <a href="http://technet.microsoft.com/en-US/sbs/jj159331">http://technet.microsoft.com/en-US/sbs/jj159331</a>



#### Partner Resources

Find resources specifically for partners at <a href="http://partner.microsoft.com">http://partner.microsoft.com</a> and learn about the first server opportunity at <a href="http://aka.ms/pmcFirstServer">http://aka.ms/pmcFirstServer</a>



# Why Windows Server 2012 Essentials?

Simple and Easy to Use

One server meets all your business needs with simplified management and easily connects to the cloud

Protect Data with a Highly Secure, Reliable, and Compatible Server

Secure data with simplified backups and built-in disaster recovery

Cost Effective

Secure data with simplified backups and built-in disaster recovery, and deliver more cost-effective, scalable storage solutions

Access Business Information from Virtually Anywhere, Anytime

Consistent and easy access from virtually anywhere, anytime, with high security

Room to Grow

Run line-of-business applications Easily convert to Windows Server 2012 Standard

#### Windows Server 2012

Simplified DirectAccess

BranchCach

е

Increased

Productivity

Simplified VDI Configuration and Management

Hyper-V

Replica NIC Teaming

Server Manager

Storage Spaces

Rich PowerShell templates

Expanded Device

Support

Network
Virtualization Live

Migration