# Overview of What's New in SharePoint 2010 for IT Professionals

# Mirjam van Olst Macaw



# **About Mirjam**



Blog: http://sharepointchick.com Email: mirjam@macaw.nl Twitter: @mirjamvanolst









### Getting Started

• System requirements

 Fluent and easy installation

### SharePoint Infrastructure

- Security
- Service Applications

### Managing SharePoint

- PowerShell
- Logging, Monitoring and Throttling
- Disaster Recovery and High Availability

### Fancy new features highlighted

 Enterprise Content Management

### Getting Started

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### System Requirements

- OS requirements for SharePoint 2010
  Windows Server 2008 SP2 or later
  - Windows Server 2008 R2
  - Must be 64 bit
- SQL requirements
  - SQL Server 2005 SP2 or later
  - SQL Server 2008 SP1 CU2 or later
  - SQL Server 2008 R2 or later
  - Must be 64 bit



### Splash Screen



# SharePoint Server 2010

#### Prepare

<u>Review hardware and software requirements</u> Read the installation <u>g</u>uide Read the upgr<u>a</u>de guide

#### Install

Install software <u>p</u>rerequisites Install SharePoint Server

#### **Other Information**

Visit Windows Update Visit product website

E<u>x</u>it

### **Software Prerequisites**

- SQL Server Native Client
- Geneva Framework
- Sync Framework
- Chart Controls Framework
- Filter Pack
- Analysis .NET Framework data provider
- Web Server Role
- Application Server Role



### **Prerequisites Installer**

Microsoft® SharePoint® Products and Technologies 2010 Preparation Tool X Welcome to the Microsoft® SharePoint® Products and Technologies 2010 Preparation Tool The SharePoint® Preparation Tool checks your computer for required products and updates. It may connect to the internet to download products from the Microsoft Download Center. The tool installs and configures the following products: Windows Server 2008 Service Pack 2 Application Server Role, Web Server (IIS) Role Microsoft SQL Server 2008 Native Client Microsoft .NET Framework 3.5 SP1 Windows PowerShell(TM) V2 (CTP3) Microsoft "Geneva" Framework Runtime Microsoft Sync Framework Runtime v1.0 (x64) Microsoft Chart Controls for Microsoft .NET Framework 3.5 Microsoft Filter Pack 2.0 Microsoft SQL Server 2008 Analysis Services ADOMD.NET Learn more about these prerequisites Next > Cancel Microsoft<sup>®</sup> SharePoint Connections2010 AUTUMN

# **Installation Tips and Tricks**

- Don't use the Configuration Wizard to configure Service Applications and create a Web Application
- Make all Service Accounts Managed Accounts as soon as Central Administration is set up
- Only provision the services you need
  Remember, all services running on your server consume resources!



Getting Started

- Tuesday 16:30 17:45
  - MSM04: Successfully Implementing SharePoint Ingeborg Struijk
- Wednesday 09:30 10:45
  - MIT09: Architecting and Managing Virtualized SharePoint 2010 Farms
     Michael Noel
- Wednesday 11:15 12:30
  - MIT03: Lessons Learned and Best Practices from Enterprise Deployments of SharePoint – Spencer Harbar



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# Security

- Managed Accounts
  - Centrally managed services accounts
  - Automatic password management
- Server addition to farm secured by Passphrase
  - No re-entering of farm account credentials
- APIs for permission reporting
- Impossible to retrieve passwords through the object model

# Managed Accounts

Register Managed Acco	unt - Windows Internet Explorer		×.
🕒 🕤 🗢 📴 http://dem	2010a:5555/_admin/registeraccount.aspx?Source=http%3A%2F%2Fc	Fdemo 20 10a % 3A 5555 % 2F % 5F admin % 2F 🔽 🔄 🚱 Bing	
🖕 Favorites 🛛 👍 🄏 Sugg	jested Sites 👻 🙋 Web Slice Gallery 💌		
📅 Register Managed Accoun		🟠 🔹 🖂 👻 🖃 🖶 🔹 Page 🔹 Safety 👻 Tools 👻 🔞	-
Site Actions 👻 📬		Give Feedback System Account	-
SharePoint 2010	Central Administration → Register Managed Ad Use this page to register new managed accounts.		
		( <b>2</b>	
Central Administration Application Management System Settings Monitoring Backup and Restore Security Upgrade and Migration	Warning: this page is not encrypted for secure communication, contact your administrator. Account Registration Service accounts are used by various farm components to operate. The account password can be set to automatically change on a schedule and before any scheduled Active Directory enforced password change event. Enter the service account credentials.	Service account credentials User name Password	l
General Application Settings Configuration Wizards	Automatic Password Change Automatic password change enables SharePoint to automatically generate new strong passwords on a schedule you set. Select the Enable automatic password change checkbox to allow SharePoint to manage the password for the selected account. If an account policy based expiry date is detected for the account, and the expiry will occur before the scheduled date and time, the password will be changed on a configured number of days before the expiry date at the regularly scheduled time. Choose to enable e-mail notifications in order to have the system generate warning notifications about upcoming password change events. Specify a time and schedule for the system to automatically change the password.	<ul> <li>Enable automatic password change         If             password             expiry             policy             is             detected,             change             password</li></ul>	
Done		OK Cancel	•

# **SharePoint 2007 Shared Services**

- All or nothing (Search / Profiles / Excel / BDC)
- No real granular delegation of control
- Resource heavy
- Separate SSP Administration web site
- Custom Shared Services not possible
- Web apps were tied to specific SSP
- Scalability limitations



# **Service Application model**

### • Flexible Deployment Model

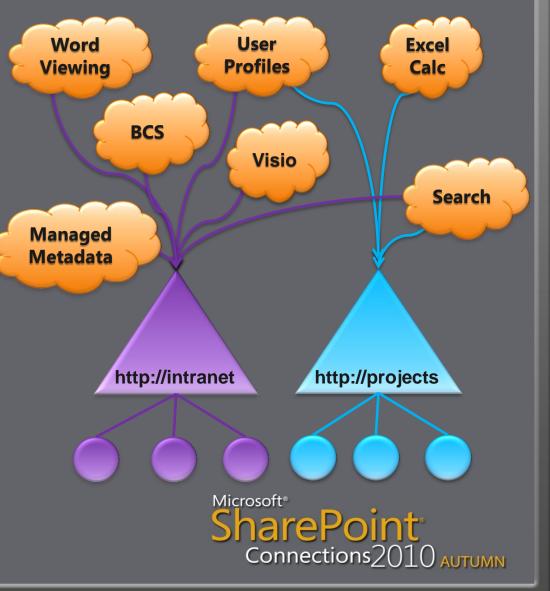
- Service Applications can easily be scaled out
- Service Applications can be grouped together
- Improved Security Model
  - Claims Based Authentication/Authorization
  - Cross-Farm Communications via Web Services
- Simplified Administration Model
  - Central Administration and PowerShell
- Web apps can consume services on an individual basis
- Multi-Tenancy
  - Some Service Applications can be partitioned <sup>Connections</sup>2010 AL

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# **Flexible Deployment**

- Access Services
- Business Connectivity Services
- Excel Services
- Managed Metadata
- PowerPoint
- Search
- Secure Store Service
- State Service
- Usage and Health data collection
- User Profile
- Visio Graphics Service
- Web Analytics
- Word Conversion
- Word Viewing



# **Deploying Service Applications**

### • Farm Configuration Wizard

- Creates all Service Applications with default settings
- Do not use it!
- Manually
  - Use the "New" dropdown in the Manage Service Application page
  - Specify custom application pool, database locations etc...
  - Creates service apps and their proxies
- For maximum control, use PowerShell
  - New-SP\*ServiceApplication
  - New-SP\*ServiceApplicationProxy

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SharePoint Infrastructure

### • Tuesday 13:30 - 14:45

- MIT02: Designing Governance: How Information Management and Security Must Drive Your Design – Dan Holme
- Wednesday 09:30 10:45
  - MIT04: Best Practices for Least-Privilege Installation, Administration, and Security of SharePoint 2010 – Dan Holme
- Wednesday 15:00 16:15
  - MIT12: Managing Multiple Authentication Providers in SharePoint 2010 for Extranets – Michael Noel
- Wednesday 16:30 17:45
  - MIT05: Service Applications and Farm Topologies Spencer Harbar

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- High Availability and Disaster Recovery

Fancy new features highlighted

 Enterprise Content Management



# Windows PowerShell

- An interactive command-line and task-based scripting technology
- A single toolset for management of many different systems (SharePoint, AD, Exchange, Windows)
- Allows IT professionals to accelerate automation of tasks
- Extensible framework that can be embedded inside other applications



# SharePoint Command-line The History

### SharePoint 2003

• Limited STSADM command-line interface

### • SharePoint 2007

• STSADM: 182 commands (MOSS)

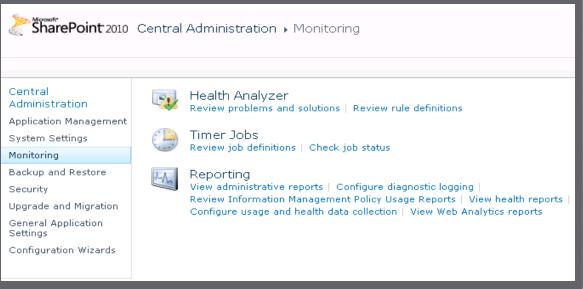
### SharePoint 2010

- 650+ PowerShell cmdlets
- Superset of administration UI
- Extensible platform
- In-line discoverability
- Optimized for batch operations



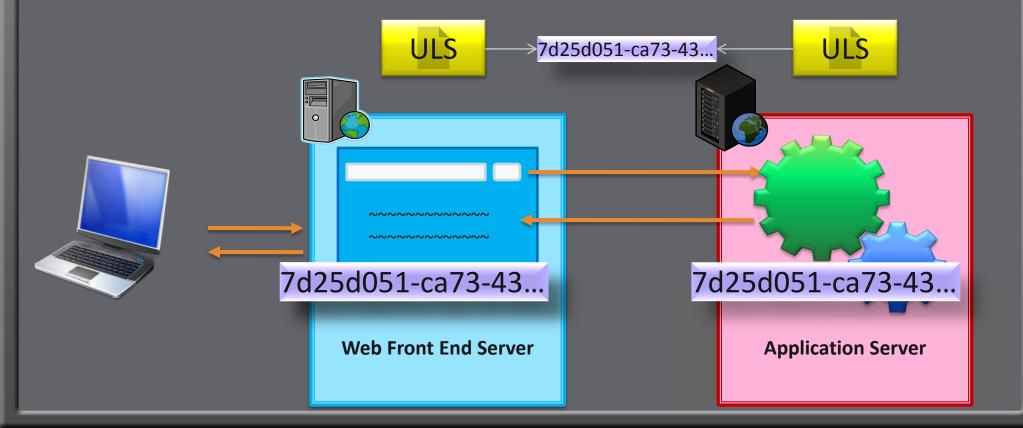
# Logging features

- Diagnostic Logging
- Usage and Health data collection
- Logging database
- SharePoint Health Analyzer
- Web Analytics
- Reporting



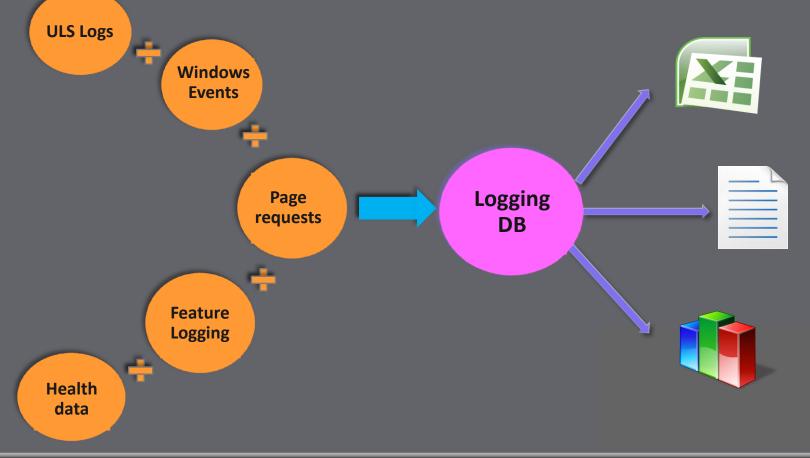
### **Correlation ID**

• You are now able to follow the conversation across layers and servers



# Logging database

- Stores 14-31 days worth of data by default
- Can be really busy and can get really big (TBs)
- Could require it's own database server

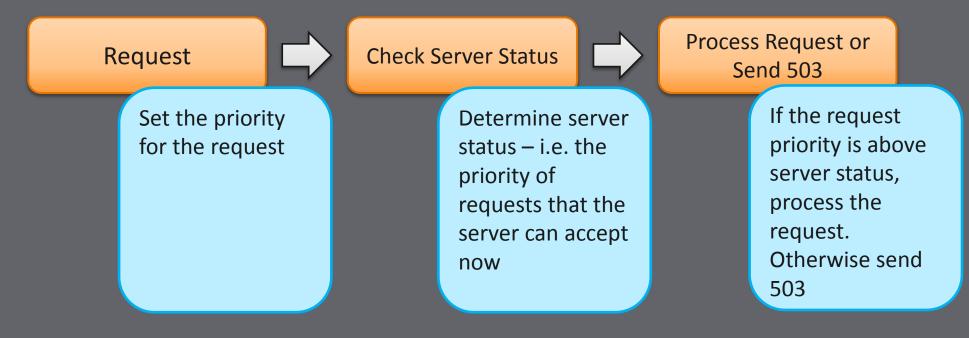


### **SharePoint Health Analyzer**

- New health analysis tool
- Enables you to proactively check for potential problems
  - Configuration
  - Performance
  - Usage problems
- Runs predefined health rules against all servers in the farm
- Health rule runs a test and returns a status
- SharePoint can sometimes help to resolve problems

# **HTTP Request Throttling**

 Refuses user requests when server is overloaded – allowing for more graceful degradation of service



# List throttling

- Sets limits on how severely users can put the beat down on your servers
- Limits the amount of rows that can be retrieved for a list or library at any one time
- Example:
  - A list with thousands of items
  - A view that would return all items in the list
  - List throttling won't allow such a request to execute
  - User gets a message that his request exceeds the throttle limit for this list
  - Hit on the server is alleviated

# **Search Components High Availability**

- Crawl component (Index server) becomes stateless
- Enables more scalable Search Topologies
- Crawl history information stored in separate crawler databases
- Both Crawl and Query components now support scaling out and redundancy

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# **Database Mirroring Support**

- UI entry point to configure mirroring for most SharePoint databases
  - Supplemental PowerShell commands available where UI entry points are not available (for the Configuration Database)



### Database Mirroring Support Implementation Experience

#### **Database Name and Authentication**

Use of the default database server and database name is recommended for most cases. Refer to the administrator's guide for advanced scenarios where specifying database information is required.

Use of Windows authentication is strongly recommended. To use SQL authentication, specify the credentials which will be used to connect to the database.

Database Server			
Principal Server			
Database Name			
Content Database			
Database authentication			
Windows authentication (recommended)			
© SQL authentication			
Account			
Password			
Failover Database Server			
Mirror Server			

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#### Failover Server

You can choose to associate a content database with a specific failover server that is used in conjuction with SQL Server database mirroring.

### **Database Mirroring Benefits**

- Complete or almost complete redundancy of the data
- Increases availability of a database
  - Active replica available to support high availability
- Can provide storage and server-level redundancy



### **Backup and Restore**

- SharePoint 2010 Native Backup
- Microsoft Data Protection Manager
- SQL Server Backup
- VSS Writer
- Third party tools
  - Carefully check what you can backup and what you can restore and whether supported methods are used



Managing SharePoint

### • Tuesday 15:00 - 16:15

- MIT06: SharePoint 2010 Disaster Recovery and High Availability Michael Noel
- Tuesday 16:30 17:45
  - MIT07: Windows PowerShell Crash Course for SharePoint Administrators – Don Jones
- Wednesday 11:15 12:30
  - MIT14: Administering SharePoint Server 2010 with Windows PowerShell – Don Jones
- Wednesday 13:30 14:45
  - MIT15: Keeping Your Farm Healthy: Logging, Monitoring and Throttling — Mirjam van Olst
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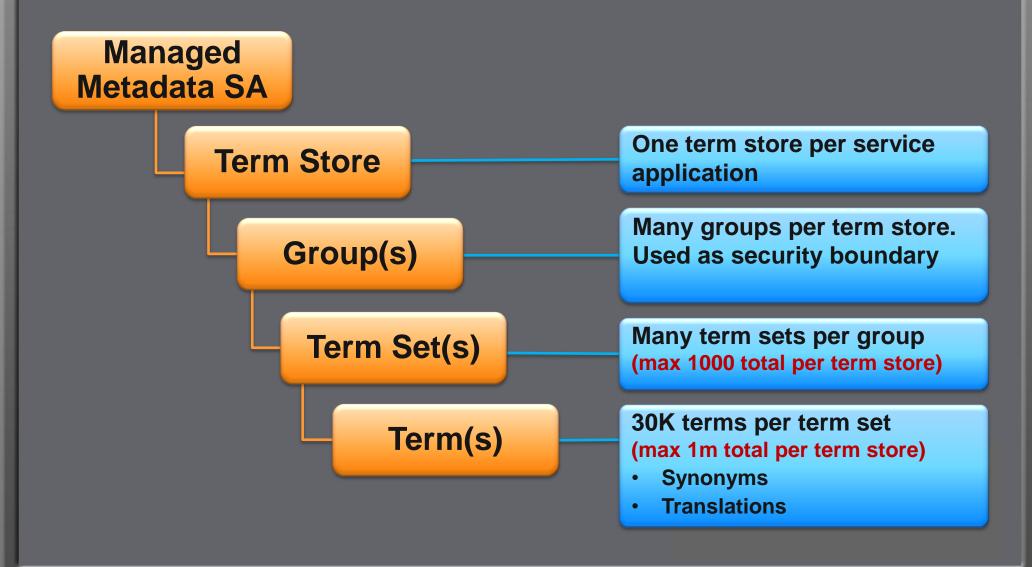
 Enterprise Content Management

### **Enterprise Content Management Features**

- Managed Metadata Service Application
- Document Centers
- Document ID
- Document Sets
- Metadata Navigation
- Content Type Syndication
- Content Organizer



# **Managed Metadata Service Application**

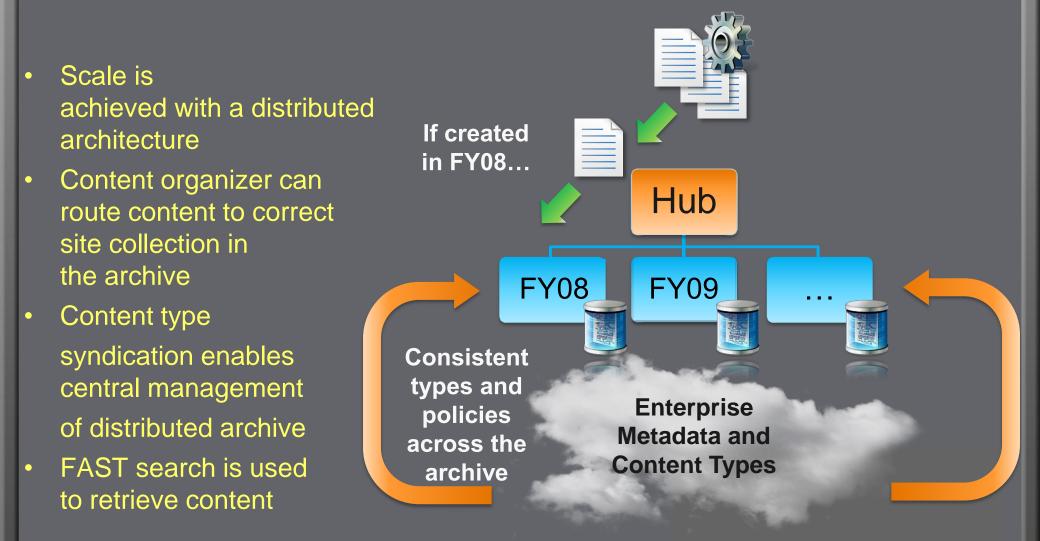


# **Content Type Syndication**

- Synchronizes content types across site collections
- Select site collection as content type hub in central administration
- Set managed metadata service proxy to consume content types from content type store
- Turn on publishing for content types in hub
- Run timer jobs to make content types available in other sites



### **Massive distributed archives**



# **Content Organizer**



- Automatically routes documents to different libraries and folders
- Can be used to automatically create new folders after a certain # documents have been added
- No user intervention required
- Does not work for lists, just libraries
- DropOff folder created when "Content Organizer" site feature is enabled



### **Content Organizer**

- Routing Feature
- Automatically routes documents to different libraries and folders
- Can be used to automatically create new folders after a certain # documents have been added
- No user intervention required
- Does not work for lists, just libraries



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### • Wednesday 15:00 - 16:15

- MIT13: Information Architecture and the Managed Metadata Service: A to Z – Dan Holme
- Wednesday 16:30 17:45
  - MIT16: SharePoint 2010 Enterprise Content Management for IT Pros Mirjam van Olst



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### Your Feedback is Important

### Please fill out a session evaluation form.

### Thank you!

