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# Sub-Site or Site Collection?

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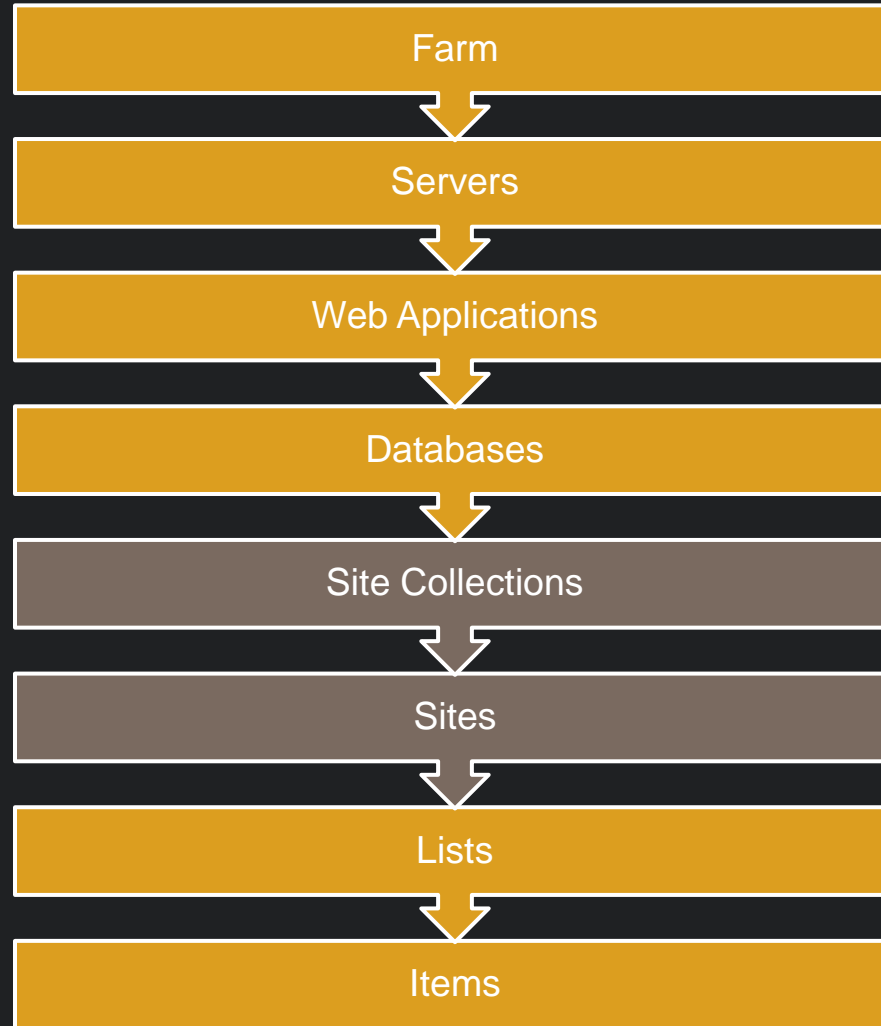
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# Agenda

- ⦿ Site Collections vs. Sub-Sites
  - What you need to consider
- ⦿ There can be only one
  - Considerations for making multiple Site Collections “appear” homogenous
- ⦿ Dealing with change
  - Converting to or from Site Collections

# Site Collections vs. Sub-Sites



# Considerations

- Scalability
- Backup/Restore
- Security
- Search Settings
- Audit/IRM Settings
- Feature Scope
- Recycle Bin
- Content Type / Site Column Scope
- Branding
- Navigation
- Content Rollup and Aggregation

# Scalability

- The single most critical reason for using multiple Site Collections is scalability
- Limit Content Databases to 200GB
- Limit Site Collections to 100GB
  - If you must go over 100GB then use only 1 site collection in the content database
  - You will encounter performance issues and possibly deadlock conditions
  - Split Site Collections approaching 100GB into a new Site Collection in a separate content database (PowerShell)
- Watch out for the second stage recycle bin!

# Backup/Restore

- Full fidelity backups are only possible at the Site Collection level
- SharePoint 2010 Allows Sub-Site and List/Library Recovery
  - Not Full Fidelity
    - Cannot restore recycle bin, workflows, alerts, personalization settings, auditing data
- 3<sup>rd</sup> party solutions offer full fidelity recovery at more granular levels

# Security

- Site Collections allow security groups and permissions to be isolated from each other
- Management is more complex with Site Collections
  - Difficult to see what access a user has across Site Collections
  - No OOTB way to synchronize across Site Collections
- Avoid breaking inheritance where possible
  - May result in unforeseen/undesirable consequences
  - Site Collections can reduce the need to break inheritance
- For large deployments Site Collections can help overcome SharePoint group limitations
  - Cannot go over 2000 users or AD groups in a single ACL



# Search Settings

- ⦿ Search Scopes are defined at the Site Collection level
  - You can create shared scopes via the SA but they must be “activated” at each Site Collection
- ⦿ Best Bets and Keywords are Site Collection scoped
  - Use a single search center
- ⦿ Settings must be manually (or programmatically) synchronized across site collections

# Auditing/IRM

- ⦿ Policies are created at the Site Collection scope
  - Compliance and regulatory requirements can be enforced in a consistent fashion
- ⦿ No built-in mechanism for synchronizing policies across Site Collections
  - Will have to be done manually or programmatically

# Feature Scope

- Features can be scoped to a Site Collection or Web (or Farm or Web Application)
- You can prevent access to certain functionality by using Site Collections
  - Some Features must be scoped to a site collection
  - You might have to activate a Feature thereby (potentially) making functionality available to all users/contributors/designers of a site

# Recycle Bin

- ⦿ Each Site Collection has a First and Second Stage Recycle Bin
  - First Stage counts towards the Quota
  - Second Stage does not count towards the Quota
    - Be aware of the defaults – 30 days in the first stage and 50% of the Site Collection Quota for the second stage
    - If there's no quota then the second stage will grow infinitely
- ⦿ For large Site Collections change the 2<sup>nd</sup> stage to ~20% and Quota to < ~80GB
  - This will reduce the amount of additional data over the recommended 100GB allotment

# Content Types / Site Columns

- ◎ Two Options:
  - Content Type Syndication
    - Can “Publish” Content Types across Site Collections
    - Requires Metadata Service Application (Enterprise License)
    - Don’t mix with Features
    - Only Propagates Site Columns associated with Content Types
  - Use Features to deploy to multiple Site Collections
    - Not recommended if Content Type Syndication is used
    - Can be used to propagate Site Columns not associated with Content Types

Demo

# Content Type Syndication

# There can be only one!

- You want people to think that there's only one [Site Collection]...
- ...but in reality there's a whole mess of them that we just didn't want users to know about



# Branding

- Masterpages and CSS can be used to enforce a consistent branding experience
- Use Features to deploy branding
  - Use Feature Stapling to automatically apply the branding to new Site Collections / Sites
  - This provides a seamless experience for the end-user



# Consistent Navigation

## **SPXmlContentMapProvider**

- ⦿ Uses an XML file to store the navigation
- ⦿ Easy to implement
- ⦿ Navigation is hard coded
- ⦿ Changes should be deployed via a Feature
- ⦿ Does not support security trimming or audience targeting

## **Custom SiteMapProvider**

- ⦿ Can get the navigation from a “source” site or list
- ⦿ Requires a lot of custom code
- ⦿ Could support security trimming or audience targeting

## **Manual**

- ⦿ Viable for small numbers of Site Collections

# Content Aggregation

- ⦿ Out-of-box
  - Search Results Web Part for cross Site Collection
  - Content Query Web Part or Data Form Web Part for single Site Collection
- ⦿ 3<sup>rd</sup> Party
  - Many different options
    - Example: [Lightning Conductor Web Part](#)
- ⦿ Custom
  - Make sure you load test (users and content)!

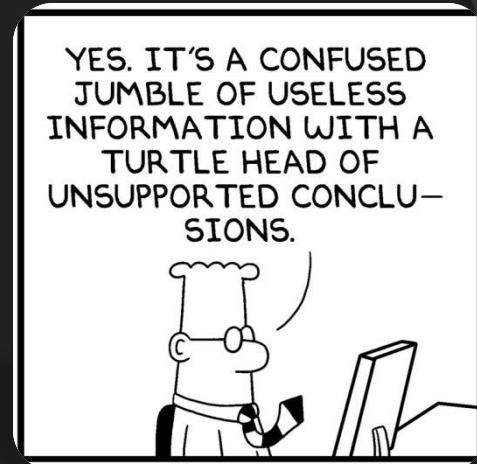
# Windows PowerShell

- ◎ Learn it!
  - You'll need to eventually
- ◎ Great for making sweeping changes and cross Site Collection reports
- ◎ Download My custom PowerShell Cmdlets and Scripts
  - <http://stsadm.blogspot.com/>

Demo

# Reporting with PowerShell

# Dealing with Change



# Managing Content Databases

- ⦿ Remember to set the Max # of Site Collections per DB – don't use the default
  - This will help to enforce the 200GB Content Database sizing guidelines
  - Use Quotas!
- ⦿ Move-SPSite PowerShell Cmdlet
  - Move a Site Collection from one Content Database to another
- ⦿ Use New-SPSite to create a Site Collection in a specific Content Database

# Converting to/from Site Collections

- ⦿ Not a conversion but a migration
- ⦿ Use Export-SPWeb & Import-SPWeb PowerShell Cmdlets
  - Export/Import Sites and Lists/Libraries
  - No Workflow Tasks/State
  - No Personalization Settings
  - No Alerts
  - No Recycle Bin Items
  - No Audit Information
- ⦿ Non-publishing sites are simple(r)
  - Watch out for Web Parts which reference Lists via a GUID
  - Watch out for Features scoped to the Site Collection that may need to be activated
- ⦿ Publishing Sites migrate with numerous errors...
  - If Lists/Libraries are all you need then you can avoid a lot of trouble by focusing on them only
    - Watch out for Lookup Columns!

# Publishing Site Migration Errors

- File not found errors on pages that map to the wrong Page Layout path and/or missing Page Layouts
- Page Layouts and Settings page produces an XML parsing error
- Page Layouts do not have the correct Content Type assigned
- File not found errors for missing master page files
- ContentType field for the Master Page Gallery library is corrupt and will need to be reset (wrong field type)
- Site Collection scoped Features may need to be activated
- Global Navigation will be corrupt or missing
- Web Parts that use a GUID to refer to the target item will be broken
- And more....



Demo

# ConvertTo-SPSite / Repair-SPSite

# Resources

- ◎ TechNet – Plan for Software Boundaries
  - <http://technet.microsoft.com/en-us/library/cc262787.aspx>
- ◎ My PowerShell Cmdlets & Scripts
  - <http://stsadm.blogspot.com>



Thank You!!!

Questions?