Contextual Considerations: Logical Architecture and Taxonomy

SharePoint Saturday – Boston
14 March 2009
Dan Usher
• **Introduction**
• Logical Architecture
• Taxonomy
• Project Planning
• Technical Requirements
• Scenarios
• Conclusion
Introduction

- Who am I?
- What environments have I worked in?
- What have I seen?
- What is this talk about?
• How many Solutions Designers do we have in the room?
• How many Developers?
• How many SharePoint Infrastructure Engineers and Architects?
• How many Project Managers that are looking to get a better idea of taxonomy and architecture?

How about you all?
What's your system's vision?
• Considerations, Tradeoffs and Compromises to meet the Context
• Assessing the context...
  ◦ Are you building into the cloud?
• Always consider the context...

Stepping into Contextual Design...
• What’s the context of your use for SharePoint?
• Do you need to be able to roll up data?
• Re-utilize SharePoint groups
• Workflow tools?
• Consider the context of your environment and requirements

What’s a vision in look like?
Do you feel like it’s like this?
Agenda

- Introduction
- **Logical Architecture**
- Taxonomy
- Project Planning
- Technical Requirements
- Scenarios
- Conclusion
• What defines a logical architecture?
• Why is a logical architecture important?
• How can you really make use of a logical architecture?
• What does a logical architecture consist of and look like?
What makes up a logical architecture?

- Web Zones (Intranet, Extranet, Internet, etc.) and Zone Policies
- Different Authentication Models
- Content Databases
- Application Pools
- Web Applications
  - Multiple SSPs
  - My Sites
  - Collaborative Team Sites
  - Secure Content Authoring and Publishing
- Site Collections
How is your logical architecture affected by your requirements?

- Extranet
- Public Facing Website
- Permissions models
- Authentication Schemes
- Interoperability with other applications
• Introduction
• Logical Architectures
• **Taxonomy**
• Project Planning
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• Conclusion
• Taxonomy is the science (and art) of classifying a broad range of things. Originally used to classify plants and animals – phylum, genus, species, etc. – taxonomy is now applied to everything from product inventory to web sites.

• SharePoint Farms
  ◦ Web Applications
    • Collections of Site Collections
      ◦ Collections of Sites
  ◦ Managed Paths
  ◦ Nesting Paths
  ◦ Reflection of the Organization
  ◦ Requires out of the box thinking
What are the components of Taxonomy?
• Why not just deposit everything in a single document library?
• Why not just use search for everything?

But do I really need a taxonomy?
What about permissions?

- Inheritance and Breaking it...
  - ...and re-inheriting it
- SharePoint Groups
- AD / LDAP Groups
- Single Users
• Site collections bridge logical architecture and information architecture. The design goals for site collections in the model are to satisfy requirements for URL design and to create logical divisions of content.*

• Introduction
• Logical Architectures
• Taxonomy
• **Project Planning**
• Technical Requirements
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• How does a project plan fit into logical architectures and taxonomies?
• Or rather...
• How does a logical architecture and taxonomy fit into a project plan... 😊
Microsoft has a project plan for planning...

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Introduction
Logical Architectures
Taxonomy
Project Planning
**Technical Requirements**
Scenarios
Conclusion
Technical Requirement Considerations

- What will the system do?
  - Collaboration?
  - Publishing?
  - Development Platform?
- How big will the system be?
- How will it be accessed?
- What will be the level of usage?
- Are we dealing with a cross domain solution?
- SQL Mirroring or Clustering?
What are your limitations technically?

- Surrounding Infrastructure
- System Memory
- IIS - Number of Web Applications
- Number of sites / site collections
- DNS
- Authentication Methods
- PKI / SSL / Wildcard Certificates
- Network Interfaces / IP Addresses
- Storage
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Scenario 1 - Requirements

- Small Organization (250-300)
- Document Management
- Collaboration
- Federation
- Low Budget
- Information Rollups
Scenario 1 – Considerations

- May reflect an organization’s natural divisions
- Rolls up information easily
- Works well with small numbers of users
- Out of the box method...
- Pushes down Site Columns
- Reutilizes Content Types
Scenario 1 – Potential Solution

- Small Farm
- Use of SharePoint Designer
- User Management Tool
- ADFS

- Taxonomy Examples
  - Sites
    - Rolled Up Information
    - Security Group Madness
    - User Training
  - Site Collections
    - Drawback Rollups
    - User training
Pirate Nosh Logical Architecture Example

Users
- Partner Employees
- Remote Employees
- Internal Employees
- Farm Administrators

Zones and Authentication
- Extranet: Authorization + terms authentication
- Default: Authorization + software compatibility
- Intranet: Authorization + integration options
- Custom: Authorization + integration options

Server Farms
- Farm A
  - Front End Web Servers
  - Application Server
  - Load Balancer

Shared Services
Administration and Central Administration
Sites

Application Pools
- Application Pool 1
- Application Pool 2
- Application Pool 3

Web Applications
- Site Collections

Sites and My Sites

Content Databases

Zones and URLs

Policies
Pirate Nosh – Example Physical Architecture
Scenario 2 Requirements

- Collaboration
- Document Management
- Workflow
- Records Management
- Large User base - 100k users
Scenario 2 Requirements – But wait there’s more...

- Complex Permissions
- Extranet Access
- Smartcard Authentication
- High Availability
- Integrity of Data
- AD Infrastructure - Security Groups
Scenario 2 – Potential Solutions

- Integration of 3rd Party Records Management Solution
- Use of the DOD 5015.2 Record's Management Pack with a Microsoft Partner
- Confluence Wikis
- Rights Management Server
- User Management through AD or Third Party Tools
- Large Farm
Scenario 2 - Potential Solutions

- SQL Configuration
  - Mirroring - remove the SPO
  - Clustering - better scalability
  - Mirror the data of the cluster - best of both worlds
- Log Shipping

- Third Party Mirroring Tool
- Split DNS
- WCM System
- Captaris, K2, Nintex?
Scenario 2 - Considerations

- Typically doesn’t get planned overnight
- May or may not reflect what an organization actually looks like
- Best to plan it out with time
- Discover what is out there...
Binary Brewery Logical Architecture Example
Binary Brewery Taxonomy Example
Binary Brewery Physical Architecture Example

![Diagram of Binary Brewery Physical Architecture Example]
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Each project requires that you examine the contextual considerations of the environment and vision that you are working toward to accomplish with successful effectiveness.
Your requirements drive your taxonomy and logical architecture...

Which in turn drive your hardware requirements...

If you don't know what you're going to use SharePoint for, start off small and scale your farm up as you go...

Crawl... Walk... Run...

Conclusion II
• What you start with on Day One isn’t what you’re going to end up with in...
  ◦ Six months...
  ◦ A year...
  ◦ Day 472...

Remain Flexible!!!
User adoption in and of itself will cause your environment to change...

...adapt to the context as it changes.
• Follow me on Twitter – twitter.com/usher
• Follow my blog – http://www.sharepointdan.com
• IM?
  ◦ gTalk danusher79
  ◦ Live danusher@live.com
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And that’s a wrap...