



Upgrading to SharePoint 2016 or SharePoint Online

March 30, 2016

#### Peter Carson



- President, Envision IT
- SharePoint MVP
- Virtual Technical Specialist,
   Microsoft Canada
- Microsoft\* Most Valuable Professional

- peter@envisionit.com
- http://blog.petercarson.ca
- www.envisionit.com
- Twitter @carsonpeter
- VP Toronto SharePoint User Group



#### **Amanda DaCosta**

#### Sales

• e: adacosta@envisionit.com

• p: (905) 812-3009 x250



## Agenda

Introductions **Overview of Envision IT Upgrade Overview** Upgrading to SharePoint 2016 Upgrading to Office 365 Questions / Next Steps



#### **Envision IT Overview**

- O365 Productivity Consultants
- Go-to partner for SharePoint Websites, Intranets, Extranets, and Collaboration portals
- Working with SharePoint since 2001
- Microsoft Gold Partner
- Multiple award winner

#### **Microsoft Partner**

Gold Collaboration and Content Silver Cloud Productivity Silver Cloud Platform Silver Application Development







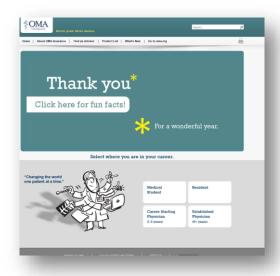






#### **Envision IT**

# Public Websites



# Intranets / Staff Portals



# Extranets / Member Portals











#### **Training**



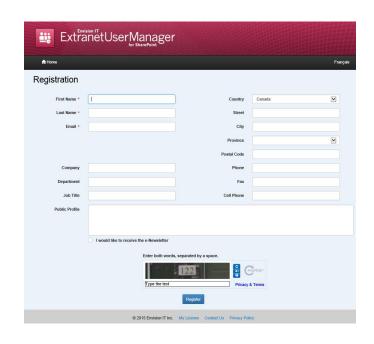
Envision IT has 20 years of experience in delivering corporate training. We offer 2 end-user training courses for SharePoint:

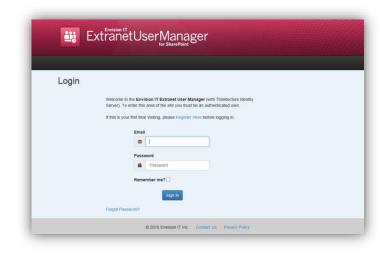
- SharePoint Collaboration
- Web Content Management



#### **Extranet User Manager**







- Easy delegation of user management to business
- Self-registration, approvals, forgotten password reset
- Simplified login for both internal and external users

#### Poll 1

Which Version of SharePoint are you currently using?

- Office 365
- SharePoint Server 2013
- SharePoint Server 2010
- SharePoint Foundation (2010 or 2013)
- MOSS 2007 or WSS 3.0



#### Poll 2

#### How do you use SharePoint today?

- Internal collaboration
- Internal web publishing (Intranet)
- Extranets
- Public facing website



## Upgrading

#### **Upgrade Goals**

- These include Platform Upgrade plus any combination of the following:
  - Rebranding
  - New Information Architecture
  - Leverage New SharePoint Capabilities
  - New Governance, Legal and Compliance Initiatives
  - and more ... driven by business needs
- Alignment of IT SharePoint Initiative with Business Goals



#### Challenges & Considerations...

- Should we upgrade...
- Can we upgrade...
- How should we upgrade...
- What is the ROI for doing this?
- What is the opportunity cost if we don't?



## **Upgrade and Migration Strategies**









## Upgrade to the Next Version

The only built-in method supported and provided by the product

Things to look out for:

Storage requirements

Customizations & missing files

Changes in supportability limits

Orphaned sites

Patch level (not up to date)

Platform changes (Search, OWA, etc.)

Authentication type (Classic, Claims, etc...)



## Leapfrog to the Latest Version

Requires 3<sup>rd</sup> party tools or multiple upgrades

Things to look out for:

Storage requirements
Customizations & missing files
Changes in supportability limits
Orphaned sites
Running workflows
Running workflows
Depricated features
Load on resources (hardware and people)



#### Upgrade/Migrate to the Cloud

#### Benefits

- High Availability/Disaster Recovery is Microsoft's responsibility
- No need to maintain current software and patch levels

Requires 3<sup>rd</sup> party tools or manual migration

Things to look out for

Difference in capabilities

Not all workloads available in the cloud

Certain workloads are challenging in hybrid mode

Connectivity to other systems and their locations

Existing solution-specific customizations/managed code

Licensing costs for 3rd party migration tools, support, etc.

Future plans with regards to customizations, integration, etc.

Amount of data to be migrated and throughput targets during process



## Organizational Aspects - Environment & Skills

Who owns the environment?

Who manages the environment?

Who has access to the environment's servers?



How skilled is your organization on the new version of SharePoint?

Operations team

Development team

Support organization



#### Organizational Aspects - Customizations

- □ Are customizations a result of an effort by a 3<sup>rd</sup> party implementer?
  - □ Are the customizations supported in the current version or will they need to be modified?
  - □ Is the IT Provider providing an upgraded version?
  - Contact vendor as soon as possible to better understand upgrade path and planning.
- Were the customizations created & deployed by internal IT resources?
  - □ Is the team that created the customizations available to assist in the upgrade effort?
  - □ Are the specifications, documentation artifacts, etc. available?
  - ✓ Include relevant internal development teams in upgrade plans & discussions ASAP
- □ Is the source code/configurations available for modification if needed?
- □ Are the customizations being used by other deployments?
  - □ Are the other deployments being upgraded as well?
  - Will you branch the code/customizations?
- What will the overall business impact be on upgrading the customizations?
- ✓ Test, Test, and Test some more...



## Organizational Aspects – Project Management

- Project Management Skills & Experience
- Support within the Organization
- Executive Sponsor
- Internal IT
- Business Units
  - ✓ Ensure adequate level of support
- External or Internal
- □ Is the Project Management service provided by an internal or external resource?
- Where do ultimate interests lie?
- Project Management approach (ITIL, Agile, Ad-Hoc ©, etc.)



#### **Business Case**

- Understanding the Business Case
  - Current scenario, desired end-state, ultimate "success factors"
  - Timeline & Schedule?
  - Overall functionality and integration with S4B & Exchange? (User Productivity)
  - External drivers, deadlines, etc.
  - Outsource contracts, retirement of hardware, other related projects, budget, etc.
- Complimentary Technologies in Use/Planned
  - Exchange? Which version?
  - □ S4B? Voice, IM/Chat? Which version?
  - Office Suite and version?
  - Operating System (Vendor & Version)
  - Supported Browsers and requirements



#### How to Discover & Analyze Risks

- Technical (environmental)
  - Tools-based approach for assessing key metrics
    - ✓ Size of environment (# of site collections, content databases, etc.)
    - ✓ Number of Farm solutions
  - Goal: Quickly establish risk areas and potential areas of concern
    - Example: Multi TB Content databases, unsupported customizations, etc.
- Organizational
  - Consultative approach with a structured, well-defined execution
    - ✓ External factors, interdependencies, capabilities, opportunities
  - Goal: Thoroughly uncover tacit areas of concern and identify risks to execution of overall project
    - Example: Unrealistic budgetary or timeline constraints, insufficient resources or skills, etc.



#### Migration Gotchas

- Third Party Web Parts and Components
- Customizations
  - Master Page Design
  - Solutions
  - Features
  - Binaries (BIN folder, GAC)
  - Web.config file entries
  - Event Handlers
  - Timer Jobs
- Authentication changes (Claims vs. Classic)
- Search configuration
- Workflows



## Identify and Update Customizations

- Create a list of all customizations in the environment
  - Solutions
  - Features
  - Web Parts
  - Event Handlers
  - Master Pages
  - CSS files
  - •
- Identify the source of the customizations (third-party or in-house)
- Find or create updated or upgraded versions of customizations as needed
- Make sure you check all SharePoint servers in the Farm



#### Pre-Upgrade Assessment

#### What We'll Do

- Inventory your site content (lists, libraries, pages etc.)
- Run <u>SPDocKit</u> on your farm to inventory the farm infrastructure
- Review all custom and vendor solutions to determine the impact on the upgrade and identify necessary remediation tasks
- Consult with you to determine the best upgrade approach for your SharePoint site, either to SharePoint 2016 or Office 365

#### What You'll Get

- At the end of the assessment you will receive a report that includes the following:
- An inventory of your site content:
  - Number of lists and libraries
  - Number of pages
  - Number of documents
  - Number of list items
- A detailed report of the farm configuration
- A recommended approach and estimated cost for migration or upgrade

#### **Pricing**

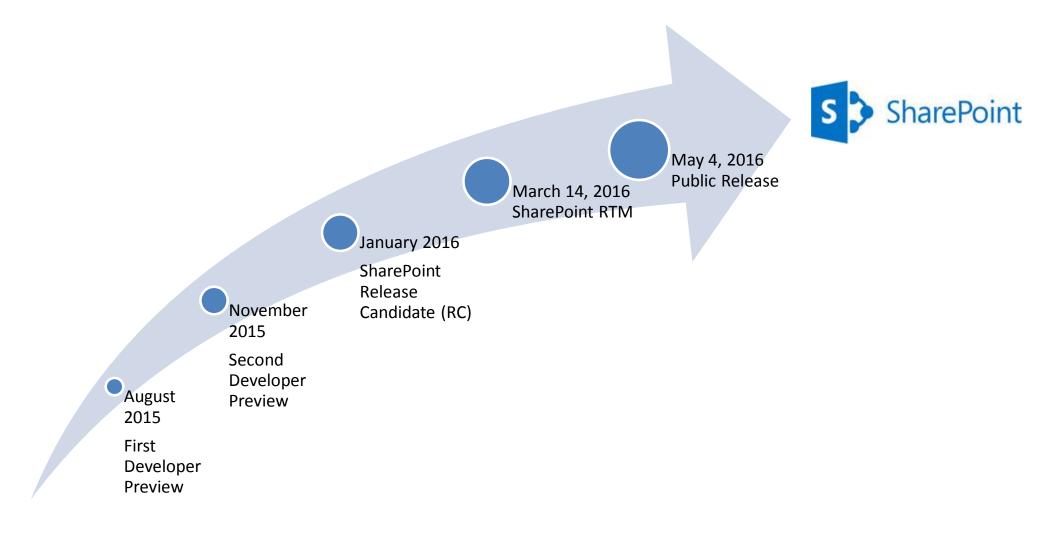
The cost of this service starts at \$1,480 for a simple farm

www.envisionit.com/solutions/featured-services/pre-upgrade-assessment



# Upgrading to SharePoint 2016

## SharePoint 2016 Roadmap





## **SharePoint 2016 Requirements**

- 4 cores, 12-16 Gb RAM for a 3-tier farm
- 4 cores, 16-24 Gb RAM for a single server pilot farm
- OS
  - Windows Server 2012 R2
  - Windows Server 2016 Technical Preview 2
- SQL Server 2014 SP1



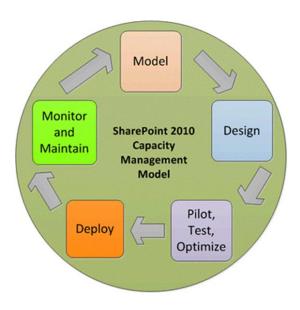
#### **Capacity Planning Decisions**

- Understand the concepts behind effective capacity management.
- Define performance and capacity targets for your environment.
- Select the appropriate data architecture.
- Choose hardware to support the number of users and the features you intend to deploy.
- Test, validate, and adjust your environment to achieve your performance and capacity targets.
- Monitor and adjust your environment to match demand.



## **Capacity Management**

- Capacity Management Model
  - Model
  - Design
  - Pilot, Test, Optimize
  - Deploy
  - Monitor and Maintain



#### **Hosting Options**

- On Premise
- Hosting Centre
- Office 365
  - Some constraints on functionality and customizability
  - Not suitable for public web sites
- Windows Azure
  - https://blog.petercarson.ca/Pages/Public-Website-Azure-Architecture.aspx



## Migration Approaches

- Upgrade Approaches
  - In-place Upgrade no longer supported
  - Database Attach Upgrade
    - Attach and upgrade multiple database at a time to improve performance and reduce downtime
    - Not supported for Office 365
  - 3<sup>rd</sup> Party Migration Tools
    - Allows you to reorganize content and structure as part of the migration
    - Supports Office 365



#### Database Attach Upgrade

- Schema update
- Monolithic operation
- Visual upgrade to 2013 experience must be completed before attaching to SharePoint 2016



#### **DB Attach Migration Best Practices**

- 1. Document your source SharePoint environment
- 2. Ensure the source environment is fully functioning before upgrading
- 3. Perform a trial upgrade on a test farm first to find potential issues
- 4. Plan for capacity
- 5. Back up your environment
- 6. Optimize your environment before upgrade
- 7. Create a communication plan
- 8. Set the original databases to read-only
- 9. Do not add any servers to your server farm after you begin the upgrade process
- 10. After upgrade, review the Upgrade Status page and upgrade logs to determine whether there are issues that must be addressed. Then review the upgraded sites
- 11. Train the users



#### **Third-Party Tools**

- Documentation Toolkit for SharePoint
  - www.spdockit.com
  - Generates a detailed report of your farm
- Metalogix Content Matrix
  - www.metalogix.com
  - Upgrade, migrate and organize SharePoint content
  - Upgrade to SharePoint 2010 or 2013, directly from 2003 or 2007
- Sharegate
  - en.share-gate.com
  - Migrate and reorganize
  - Currently just for lists and libraries
- AutoSPInstall
  - autospinstaller.codeplex.com
  - PowerShell scripted SharePoint Server installer



## Upgrade Projects in Flight

- www.chatham-kent.ca 2007 to 2013
- www.college-ece.ca 2010 to 2013

- New 2013 branding Bootstrap responsive design
- Collapse the deep site structure
- Leverage term store for SEO-friendly URLs



#### Sample 2016 Upgrade Project

www.envisionit.com (2013) – www2016.envisionit.com (2016)

```
Mount-SPContentDatabase "SP2016RTM_WSS_Content_www2016.envisionit.com" -DatabaseServer "sp2016" -WebApplication https://www2016.envisionit.com

DeploySolution -SolutionName "EIT_ManagedNavigation.wsp"

Import-Taxonomy "$DistributionFolder\Structure\Envision IT Term Store.xml"

$groupName = "Site Collection - " + $WebAppURL.Replace("http://", "").Replace("https://", "")

Import-Taxonomy "$DistributionFolder\Structure\Site Navigation Term Store.xml" -
SiteCollectionGroupName $groupName

SetTermsStoreNavigation -TermStoreGroup $groupName -TermSetName "Site Navigation" -SiteURL
$SiteCollectionURL
```

Uses Shakespeare scripts from <a href="https://www.envisionit.com/shakespeare">www.envisionit.com/shakespeare</a>



# Upgrading to Office 365

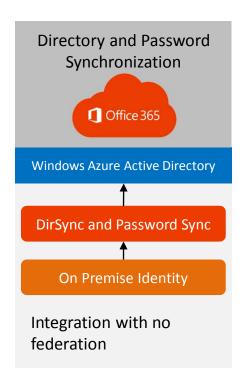
#### **Getting Your Subscription**

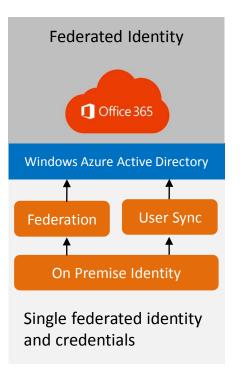
- You need an Office 365 or SharePoint Online subscription
  - SharePoint Online plan is same price as Office 365 Essentials
  - \$6.10 / month / user
  - https://products.office.com/en-ca/business/compare-office-365-forbusiness-plans
  - https://products.office.com/en-ca/business/compare-more-office-365-for-business-plans



#### Office 365 Authentication Options









#### Office 365 Recommended Authentication

- Cloud and synchronized password options are fine for Exchange and Skype for Business
  - Clients such as Outlook cache the credentials
- SharePoint has a different consideration
  - Users need to log in every time they launch the browser
  - This can be a barrier to adoption, particularly for Intranets
- Federation with AD FS is the preferred approach
  - Users are signed in automatically internally



#### Data Sovereignty and Canadian Data Centres

- Two Microsoft data centres are opening in Toronto and Quebec City
  - Already open for private preview with Azure
  - Details at <u>www.microsoft.com/en-ca/web/datacentre</u>
- How quickly your tenant is live in Canada depends on some factors
  - If you are an existing subscriber Microsoft will move you, with advance notice
    - Australia went live with two new data centres for Office 365 March 31, 2015
    - Existing tenant moves began Sept 15, 2015
    - Moves may still be in progress
  - New subscriptions will be immediately provisioned in Canada



#### Performing the Migration

- Requires a third party tool. Our preferred tools are
  - en.share-gate.com
  - www.metalogix.com
- Even with Microsoft import enhancements through Azure, migrations can take a long time
  - Depends on content complexity and size
  - Could be hours, days, or weeks
- Testing to determine both compatibility and timing is paramount



#### **Staged Migrations**

- Due to size and complexity, migrations may need to occur over a long period of time
- Requires a hybrid environment
  - Some content still in on premises SharePoint
  - Other content in SharePoint Online
- Communication, branding, and navigation are all very important



#### Office 365 Upgrade in Flight

- https://secure.envisionit.com (SharePoint 2013) to
   https://envisionit.sharepoint.com (Office 365)
- AD FS was already in place
- Custom project management and time tracking application integrated directly into SharePoint
- Dynamics CRM also integrated, and being migrated to CRM
   Online as well
- Full trust solutions

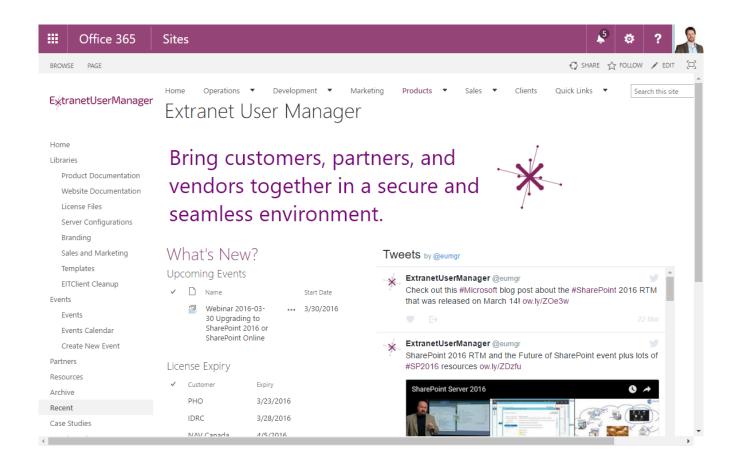


#### Stage 1 - OneDrive for Business

- All users with subscriptions get a 1 TB OneDrive for Business
- Easy move to Office 365
  - Users can do themselves
  - Third party tools can do the move
- OneDrive for Business sync client recently updated, and much more robust



#### Stage 2 – EUM Intranet Site



#### Stage 3 – Main Envision IT Intranet

- All common and department level sites
- Client archives
- Common nav between Office 365 and SharePoint 2013



#### Stage 4 – Client Sites

- All client and project sites
- Need Extranet User Manager access to Office 365 for clients
- LOB and CRM upgrades for Office 365 in progress
- Communicate changes to both staff and clients
- Retire SharePoint 2013 sites when complete



### QUESTIONS & NEXT STEPS

## THANK YOU!