

SharePoint 2013 Web Sites

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more



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PRODUCTS

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Focused on complex SharePoint solutions, Envision IT is the "go-to" partner for Microsoft SharePoint, building integrated public web sites, Intranets, Extranets, and web applications that leverage your existing systems anywhere over the Internet.





Products







Agenda







WCM in SharePoint 2013







Design of the Site







Site Build







Infrastructure Build







Application Lifecycle Management







Analytics







Web Site Gallery







Version 2.6.4847.8 Release April 15, 2013

Video Player

Version 1.0.4850.6

Release April 12, 2013

SharePoint Summit May 13-15, 2013, Toronto

DevTeach Toronto / Mississauga May 27-31, 2013

SharePoint Fest D.C. August 5-7, 2013, Washington D.C.

See all events

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S SharePoint 2013

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Third Annual Meeting of Members Video...Coming Soon!



A video recording of the College's third annual meeting of members will soon be available on our website. The video will include:

- · Greetings from the Minister of Education
- · President's Report
- Complaints Committee Report
- Auditor's Report
- Special Presentation from the College's Registrar and CEO, Sue Corke

Latest News

3/21/2012 <u>Updates to the College's Public Register</u> Looking up a registered early childhood educator (RECE) just got...

3/20/2012 <u>Notice of Council Meeting</u> Date/time of meeting: April 11, 2012; 1:00 - 5:00 p.m. April...

3/14/2012 <u>Winter Newsletter Now Available</u> The Winter '12 Member Newsletter is now available. Read the Winter...

More News...

> Public Register
> Contact Us







Over 155 years of experience in the metals industry



Stanrail Acquisition

RECENT NEWS -- March 2012. Stanrail Corporation, a premier designer, manufacturer and distributor of railcar components became part of the Roll Form Group, a division of Samuel, Son & Co., Limited.

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WELCOME TO THE NEXT CHAPTER OF SHERWAY GARDENS

Sherway Gardens continues to raise the bar in creating the definitive consumer retail experience to remain at the top of its class in the city of Toronto. From the finest details in our design to our commitment to a sustainable retail experience, Sherway Gardens' renaissance leads the way with a passionate drive towards transforming the future of shopping.



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NEWS

PHO Connections lune 2013

New Report Connecting the Dots: How Ontario Health Units are Addrossing Child and Vouth

HOT TOPICS

Middle East respiratory syndrome coronavirus (MERS -CoV)

June 2013: Monthly Infectious Disease Surveillance Report -Eocus on Synhilis

UPCOMING EVENTS

View and register for events







Rolling Ticker Title

Lorem ipsum dolor sit amet, consectetur elit. Integer eu justo ipsum, vitae vehicula dia....

News Coverage Title

Lorem ipsum dolor sit amet, consectetur elit. Integer eu justo ipsum, vitae vehicula dia...

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SCDSB Forest Hill







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News

Monday, February 4, 2013 Play Line-Up for 2013 Season Released

Wednesday, February 13, 2013 Cast List for 2013 Season Decided

Friday, March 29, 2013 Mishap during Rehearsal

Read all news articles »

Media Spotlight

Monday, May 6, 2013 ESC on CBC

Read all media spotlight articles »

Vivamus at lectus

Donec ullamcorper dui sollicitudin augue tincidunt nec blandit sem varius. Duis lacinia viverra varius. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Nulla porta dolor a neque interdum placerat. Vivamus ut nisi magna. Maecenas in mauris eu est rhoncus viverra fermentum id nulla.

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Links

- <u>www.envisionit.com</u>
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- <u>www.tarion.com</u>
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- <u>www.publichealthontario.ca</u>







What's New in Web Content Management





Easier Page Authoring With Cut and Paste

Title		×	
Quartery Results			
		- E	
Page Content	Video provides a powerful way to help you prove your point. When you click Online Video,		
	you can paste in the embed code for the video you want to add. You can also type a keyword		_
Video provides a powerful way to	to search online for the video that best fits your document.	pe	e a k
video that best fits your docume			
naco anacocorno your aocame	<pre>To make your document look professionally produced, Word provides header, footer,</pre>		
To make your document look	cover page, and text box designs that complement each other. For example, you can add a	le	VOI
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page, header, and sidebar. Clic	from the different galleries.		
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styles, your headings change to r	(related when you apply styles, your headings change to match the new theme)		
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reading is easier, too, in the new	remembers where you left off - even on another device.	1 III	A, 441
off - even on another device.	<#160;		

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Drag and Drop Files

- Drag and drop files from Windows Explorer into the browser, or the other way
- Doesn't support folders or document sets
- Open in Windows Explorer still works best for this
- Requires IE10 or current versions of Chrome, Safari or Firefox
 - IE8 and 9 supported with Office 2013 installed



Design Manager

New way to build master pages and layouts SharePoint Designer no longer required Edit and preview in any HTML editor Automatically creates the associated master page and .aspx layouts

Package into a Design Package WSP for deployment





Snippet Gallery



Configure its properties

Paste the snippet into your HTML master page or layout Changes synched to actual master pages and layouts to convert to SharePoint components

Can be used by any web design tool





Channels

Map channels to mobile devices or browsers Alternate master pages can be assigned Page layouts can include or exclude content based on channel





Managed Navigation

Site navigation driven by managed metadata

SEO-friendly URLs Connect site navigation to business concepts rather than site structure




Display Templates

Used to customize the presentation of search results

No more XSLT!!!

Three templates

- Control Overall structure of search results
- Group Show groups of results
- Item How each result is presented





Content Search Web Part

- Replacement for Content Query Web Part
- Also no more XSLT!!!
- Returns results as JSON
- Rendered with JavaScript and CSS
- Can customize results with display templates





Image Renditions

Ima	age Renditions 🛛				
ID Add ne	Name w item	Width	Height	Edit	Delete
1	Display Template Picture 3 Lines	100px	100px		×
2	Display Template Picture On Top	304px	100px	Ð	×
3	Display Template Large Picture	468px	220px		×
4	Display Template Video	120px	68px	Ð	×

- Display uploaded images in predefined sizes, widths, and crops
- Multiple renditions stored in document sets
- Content author can create renditions (including crops) in the browser

Edit In	nage Rendition	
ID	1	
Name *	Display Template Picture 3 Lines	×
Width	100	
Height	100	
		Save Cancel











Cross-Site Publishing

- Reuse content between different sites, including site collections and farms
- Catalogs can surface lists into publishing sites onto a category page and item pages
- Can be surfaced through the Content Search Web Part
- No need to create and publish web pages
- Create custom, friendly URLs
- Metadata based navigation base





Cross Site Publishing







Catalogs







SharePoint S D Site Settings > Term Store Management Tool SEARCH GENERAL Managed Metadata Service Application Proxy TAXONOMY TERM STORE **Available Service Applications** × A site may consume multiple metadata applications. Select English Managed Metadata Service Appl the one to see in the tree view. 4 🙆 Managed Metadata Service Application Proxy > 10 People Sample Import Estarch Dictionaries The SharePoint metadata manager can import a term set View a sample import file from a UTF-8 CSV format file. Use the sample file as a D E System template for creating import files. Then import the file into the desired group to create a new term set. # 105 Site Collection - sphym-114-sites-products # 🔄 Product Hierarchy **Term Store Administrators** 4 🖸 Electronics You can enter user names, group names, or e-mail redmond\pkmacct; addresses. Separate them with semicolons. These users will ▶ ⊡ Audio be permitted to create new term set groups and assign > Cameras users to the group manager role. # Computers Computers accessories Default Language C Desktops Select the default language for all Metadata in the system. English 🗸 C Laptops language. Monitors C Printers, scanners and fax Working Languages Tablets Select the "translation of" languages for terms in the term store. This will allow a term to have langua 9 G Home appliances Select languages from: 0 C Phones Installed language packs 💙 D G TV and video English Products S D Products (+) new item or edit this list Home Lists All Items Approve/reject Items My submissions Find an item Q Recent ✓ 8 □ Title item Number Group Number Language Tag Iter Ategory Rollup Image Approval Status Products Southridge Video Laptop15.4W M1548 --- 5637146264 5637145762 en-US Laptops Approved Site Contents Southridge Video Laptop15.4W M1548 *** 5637146265 5637145762 en-US Laptops Approved --- 5637146266 5637145762 en-US Laptops Approved Southridge Video Laptop 15.4W M1548 ... 5637146267 5637145762 Southridge Video Laptop 15.4W M1548 en-US Laptops Approved Southridge Video Laptop8.9 E0890 a ... 5637146268 5637145763 en-US Laptops Approved

Catalogs

Category Page

Item Page



www.contoso.com/products/Audio-Liware2g

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SEO Enhancements

- Friendly URLs
- Home page redirects
- XML sitemaps automatically generated and updated
- Custom SEO properties

SEO Propertie	es	
Name This page's name may appear in the URL	default	aspx
Title Search Engines can use the title to pair this page with search results for similar keywords.	Home	
Browser Title You can customize the text that appears in the title bar of the web browsers viewing this page. Please enter between 5 and 25 characters in this field.		
Meta Description Search Engines may display this text under a link to this page on a search results page. Please enter between 25 and 150 characters in this field.		





Variations and Multi-Lingual

- Export and import content for translation in XLIFF format
 - Pages
 - Labels
 - List items
 - Navigation
- Bing translation service comes with active SharePoint 2013 license





SharePoint 2013 Licensing Changes

- The SharePoint For Internet sites (FIS) license is no longer needed for public web sites or Extranets
- This can save significant licensing dollars
- This applies to on-premise, Azure, or thirdparty hosting options





SharePoint Licensing- 2010 vs 2013

2010	Intranet	Extranet	Internet Sites
	SharePoint		
Internal	Server + CAL	SharePoint Server + CAL	
Users		Or	SharePoint for
		SharePoint for Internet	Internet Sites (FIS)
External	N/A	Sites (FIS)	
Users*			

2013	L3 Intranet Extranet		Internet Sites	
Internal	SharePoint	SharaDaint Sarvar I CAL		
Users	Server + CAL	SharePoint Server + CAL	CharaDaint Convor	
External Users*	N/A	SharePoint Server	SharePuillt Server	

Note*: External users means users that are not either your or your affiliates' employees, or your or your affiliates' onsite contractors or onsite agents





Office 2013 On Premise Web Apps

• I have internal users who want to access Office documents via Office Web Apps, what licenses do I need to be compliant?

Scenario	Internal User
Read Office documents via Office Web Apps	Free, no Office client required
Edit Office documents via Office Web Apps	Requires Office 2013 Standard or Professional Plus

• Our company users (who are licensed for Office Client) are working with external users on projects, what licensing do those external users need to access Office documents via Office Web Apps?

Scenario	External User*
Read Office documents via Office Web Apps	Free, no Office client required
Edit Office documents via Office Web Apps	Free, no Office client required

*External Users: defined as users that are not either your or your affiliates' employees, or your or your affiliates' onsite contractors or on site agents.





Hosting Options

Site Type	On-Premise	Office 365	Azure	Third-Party
Public Web Site	Yes	Very simple	Yes	Yes
Extranet	Yes	Yes	Yes	Yes
Combined	Yes	No	Yes	Yes

Office 365 Notes

- Only very simple public web sites can be hosted in Office 365
- Microsoft currently provides up to 10,000 external clients with Windows Live ID access to an Extranet with no additional subscription costs
- A combined public web site and Extranet in a single site cannot be delivered in Office 365
- Not all SharePoint features are provided in Office 365





Responsive Web Design





Adaptive vs. Responsive

Adaptive

- Fixed breakpoints
 - Desktop > 980 px
 - Table portrait > 768 px
 - Phone to tablet> 480 px < 768 px
 - Smartphone < 480 px

Responsive

- No fixed breakpoints
- Design fluidly adapts to whatever width the browser is

We generally do a hybrid approach, with responsive design in the under 768 pixel situation



Publishing Site Page Rendering

http: Adv News Market Foreign News Industry News Industry News Welcome To News	//foo.com Maste enture Web Works g Buy Online Search Cent Home > News > en-us Title Welcontreton Field Control	Ar Page. Press Releases PageL Press Releases PageL News Body Arem ipsum dolor sit amet, conss adipiscing portitior. Morbi volutpat fermentum elementum nisi. Nam Networks News Networks	es/welcome.a welcome s naster as as as as as as as as as as	As Control Actions and a second a se	1. Welcome.aspx page is requested 2. Page layout associated with page is retrieved
	ul ancorper, Fusce port fa ilisis, Phasellus sollicit metus non pede adipisci elementum nisi. Nam su ut ullamcorper, Fusce pr fa ilisis. Phasellus sollicit metus non pede adipisci elementum nisi. Nam su ut ullamcorper, Fusce pr fa ilisis. Phasellus sollicit metus non pede adipisci elementum nisi. Nam su ut ullamcorper, Fusce pr fa ilisis. Phasellus sollicit	titor, Cras volutpat erat. Cras tinc Pire tudin erat ac justo. Lorem ipsum dolo ing portitor. Morbi volutpat leo sit am scipit. Proin tempus. In convaliis inter ortitor. Cras volutpat erat. Cras tincid tudin erat ac justo. Lorem ipsum dolo ing portitor. Morbi volutpat leo sit am scipit. Proin tempus. In convaliis inter ortitor. Cras volutpat erat. Cras tincid tudin erat ac justo. Lorem ipsum dolo ing portitor. Morbi volutpat leo sit am scipit. Proin tempus. In convaliis inter ortitor. Cras volutpat erat. Cras tincid tudin erat ac justo.	Concorner of Illa lacinia purus at tellus, r sit amet, consectetuer adipiscing elit. Fusce et sem. Maecenas viverra quam eu nihb dictu dum mauris. Quisque scelerisque. Nullam nor unt tempor sapien. Nulla lacinia purus at tellu rs it amet, consectetuer adipiscing elit. Fusce et sem. Maecenas viverra quam eu nibh dictu dum mauris. Quisque scelerisque. Nullam nor unt tempor sapien. Nulla lacinia purus at tellu r sit amet, consectetuer adipiscing elit. Fusce et sem. Maecenas viverra quam eu nibh dictu dum mauris. Quisque scelerisque. Nullam nor unt tempor sapien. Nulla lacinia purus at tellu	Sed ac lee a pede venenatis sagittis sollicitudin velir. In ut m sodales. Nunc fermentum nu id nisi elementum pulvinar. is. Sed ac leo a pede venenatis sagittis sollicitudin velir. In ut m sodales. Nunc fermentum nu id nisi elementum pulvinar. is. Sed ac leo a pede venenatis sagittis sollicitudin velir. In ut m sodales. Nunc fermentum nu id nisi elementum pulvinar. is. Sed ac leo a pede venenatis	3. Master page associated with site is retrieved
FileName	PageLayout	Title	Body	Image	4. Controls in page layout render
Velcome.aspx	PageLayout.aspx	Welcome To News	Lorem ipsum dolor sit	/Images/Chair.jpg	content from page's fields into the page

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Design Approaches in SharePoint

Adaptive Design through CSS media queries

- Broader standards approach used outside of SharePoint
- Keeps a single master page and CSS
- Some unnecessary components may still be loaded

Device Channels

- SharePoint specific approach
- Assign different master pages to different device channels
- Rules define what devices use which channels
- Device Channel Panels can also target content to channels

Hybrid here can also make sense. Device channels can be used to remove unnecessary items from the page payload.



Device Channels

Map client devices to channels

On-premises

Create channels as needed Up to 10 per site collection, up to 150 device inclusion rules

Publishing Site Template PublishingMobile Site **Collection Feature** O365 Small

Business Sites

2 device channels (Default, FallBackMobile) Cannot create new ones

De	evice	e Ch	nanr	nels o
⊕ ne	ew item o	or edit thi	s list	
All Ite	ms All I	Device Cha	annels: Sin	nple Listing •••
\checkmark	Active	Name	Alias	Description
	Yes	Mobile	Mobile	This device channel applies to any devices with a User Agent String that includes Windows Phone OS, iPhone, or Android.
	Yes	Tablet	Tablet	This device channel applies to any devices with a User Agent String that includes iPad.
	Yes	Default	Default	This channel is the default for your site. A device will see the look and feel specified by this channel when no other channels are active or when the device's user-agent string does not match the device inclusion rules for any active channels.





Device Channels

Based on User-Agent value in headers

Catch all mobile channel

\$FALLBACKMOBILEUSERAGENTS;





Device Channel Panels

Design Manager

Code snippets Consider scope when creating them

Easy to customize

Page	☐ Edit Mode Panel ↓ ☐ Device Channel Panel ☐ Security Trim ↓ ↓ ☐ Web Part Zone	Media and	Dynamic	Other Web	Custom ASP.NET
Fields -		Content +	Content +	Parts 🗸	Markup
Page Fields	Containers		Web Parts		Custom ASP.NET Markup

Preview



HTML Snippet

Copy and paste this snippet at the desired location in your HTML design file. Note that many HTML preview regions are read-only but will render properly on your site.

Device Channel Panel

About this Component

A Device Channel Panel displays the content defined within it to one or more specified Device Channels. Device Channel Panels are typically used on Page Layouts to selectively hide certain regions and functionality from or show them to specified channels, and define channel-specific CSS.

For example, an Article Page Layout may define its sidebar and Article Image Page Field inside Device Channel Panels that display only to the default channel in order to hide them from other devices, such as smart phones. Likewise, you could place a link to revert to the desktop experience (the default channel) within a Device Channel that displays only to smart phones.

Specify in which Device Channels a panel should render its contents by entering the aliases for one or more Device Channels in the IncludedChannels property, separated by commas. Any unrecognized channel aliases will be ignored. Click here to see the Device Channel List for this site.

To see the effects of Device Channel Panels, you may use URL query-strings, device emulators, or cookiebased approaches for channel-specific previews. To preview using URL query-strings, append the query string variable "DeviceChannel=Desired_Channel_Alias" to the URL of any page or the preview.

Update	Reset
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Customization - Device Channel Panel (DeviceChannelPanel)

	Important	
	IncludedChannels	MOBILE
	Accessibility	

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Testing the Default Device Channel



http://server/?DeviceChannel=Default





Testing a custom Device Channel





?DeviceChannel=Tablet

?DeviceChannel=Mobile





Planning Master Pages

Master Pages

Can Be Device Channel specific Assign Master Pages to Device Channels in Site Settings Device Channels can inherit Master Pages System Pages are not Device Channel Specific

Site Settings , Site Master Page Settings o

Site Master Page

The site master page will be used by all publishing pages - the pages that visitors to your website will see. You can have a different master page for each Device Channel. If you don't see the master page you're looking for, go to the Master Page Gallery in Site Settings and make sure it has an approved version.

You may inherit these settings from the parent site or select unique settings for this site only.

- Inherit site master page from parent of this site
- Specify a master page to be used by this site and all sites that inherit from it:

Mobile	pso-mobile	•
Tablet	pso-tablet	•
Default	pso-default	•

Reset all subsites to inherit this site master page setting



Planning Page Layouts

Page Layouts

Not Device Channel specific

Great for the same content rendered differently in the same Page Layout Use multiple page layouts when the content is different depending on Device Channel Use Edit Mode Panels to give content authors content and instructions

Setting the width of a page by Device Channel

Multiple Master Pages Width Defined in CSS





Planning Display Templates

Mobile optimized Display Templates

It all starts with the Content By Search Web Part Display Templates you create

Three primary options for implementation

Factors to consider include performance, style, and content





Option 1

Granular approach

Multiple Device Channel Panels Multiple Content By Search Web Parts Multiple Display Templates Only loads the content needed for the specified channel Performs the best More code to maintain







Option 2

Styling Content Differently

No Device Channel Panels Single Content By Search Web Part Single Display Template Master Pages define CSS per Device Channel Loads all the content, regardless of Device Channel Best when content does not change between Device Channels





Option 3 Overview

Use JavaScript *

No Device Channel Panels

Single Content By Search Web Part

Single Display Template

JavaScript displays content based on Device Channel

Loads all the content, regardless of Device Channel

Best when content changes between Device Channels and layout is mostly the same

* This is a client side approach.

Default Channel



\$24.95 Model: GOG-WOM-MULTI ┥ Color: Multi

Mobile Channel





Men's Goggles \$69.99 Color: Black



Men's Goggles \$29.99 Color: Multi







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Our Responsive Approach

- Built using the Twitter Boostrap CSS framework
 - <u>twitter.github.com/bootstrap/</u>
 - Provides a responsive design framework for supporting PC, Mac, tablet, and mobile
 - We enhanced to provide better touch navigation support
- Incorporated into the SharePoint 2013 Design Master
 - HTML based master page that can be edited with any tool
 - SharePoint converts to a master page when uploaded or saved
 - Can still be packaged into a traditional WSP solution for deployment



Going Forward

- We'd like to incorporate Device Channel optimizations into our approach
- Image Renditions are also a powerful way to optimize the page payload for different devices
 - Creates the correct sized images for the device requirements
 - Makes pages load faster





SharePoint WCM Glossary





SharePoint Glossary

Term	Definition
SharePoint Farm	A set of SharePoint servers that share a single configuration database
Web Application	A top level container and entry-point URLs for site collections
Site Collection	A set of Web sites that are in the same content database, have the same owner, and share administration settings. A site collection can be identified by a GUID or the URL of the top-level site for the site collection. Each site collection contains a top-level site, can contain one or more subsites, and can have a shared navigation structure
Path Based Site Collection	A site collection under a managed path http://webapp/sites/sitecollection
Host Named Site Collection	A site collection with its own unique URL. Must be created through PowerShell
Site	Subsite under a site collection
Site Template	A template for a single site that has been saved from another site. Site templates may or may not contain content. Templates cannot be created from publishing sites





SharePoint Glossary

Term	Definition
Site Column	 A single field that can store information of a particular type Text Choice Number Defined at the site collection level
Content Type	A content type is a reusable collection of Site Columns that can be applied to a certain category of content. Content types enable the management of metadata and behaviors of a document or item type in a centralized, reusable way. Basically, content types include the columns (or fields) that are applied to a certain type of content, plus other optional settings such as a document template.
Document Set	New content type in SharePoint 2010. A document set is a container for multiple documents to which you can assign certain metadata and treat as a single entity in many ways. In addition, a document set can contain one or more different content types.





SharePoint Glossary

Term	Definition
List	A container for list content types or custom list items. Columns can be defined via content types, or directly in the list
Document Library	A SharePoint list that contains documents where you can create, collect, update and share files with others. Like lists, columns can be defined via content types, or directly in the list
Form Library	A special type of library to facilitate the interaction with InfoPath forms
Asset Library	A library typically used to store image, audio, and video files
List Template	A template used to define the configuration of a list or library. Templates can be saved with or without content




SharePoint Glossary

Term	Definition
Term Store	An instance of the Managed Metadata Service. This can be shared between sites, site collections, web applications, or farms
Group	A collection of term sets
Term Set	A collection of related terms
Term	A word or a phrase that can be associated with a SharePoint item
Friendly URL	An SEO friendly URL defined in the term store for a page, rather than the physical URL of where the page is stored (/Pages)





SharePoint Glossary

Term	Definition
Design Manager	2013 feature used to manipulate WCM artifacts
Master Page	Defines elements that are common to all pages, such as the header, navigation, and footer
Page Layout	Defines the layout of a particular style of page, such as news or events. Each page content type can have one or more layouts associated with them
Web Parts	Functional elements that can be added to pages, typically for dynamic content
Apps	Similar to web parts, but run outside of SharePoint, while being hosted in the SharePoint page





SharePoint Glossary

Term	Definition
Cross-Site Publishing	Publishing from an authoring site collection to one or more publishing site collections
Catalog	A list that has been published as a catalog
Category Page	A page that displays a rollup of catalog items
Catalog Item Page	A page that displays a single item from a catalog
Display Template	Used to format the results on search pages, in content search web parts, and on category pages





Design of the Site









Shakespeare Reference Project

- www.envisionit.com/shakespeare
- Download the zip file for all the artifacts
 - MindMap
 - Axure wireframe
 - Word Functional Spec
 - Visual Studio projects
 - PowerShell deployment scripts
 - Term store export/import tool and XML data
 - Term store navigation control
 - Content





Setup Your VM

- Local machine
 - 32 Gb RAM and 8 cores
 - Two SSD drives
- Single local developer VM
 - 24 Gb RAM and 4 cores
 - Windows Server 2012
 - SQL Server 2012
 - SharePoint Server 2013 installed with AutoSPInstall
 - Visual Studio 2012
 - Office Developer Tools for Visual Studio 2012





Use Cloudshare

- Need a full Cloudshare account for outbound Internet access
 - www.cloudshare.com
- May be able to use a trial if you can get the files loaded
- Download and install the trial software and Shakespeare package
 - www.mindjet.com/products/mindmanager
 - www.axure.com/features
 - <u>http://aka.ms/OfficeDevToolsForVS2012</u>
 - www.envisionit.com/shakespeare
- Need to setup the Managed Metadata Service
- Disable the loopback check





Vision and Scope Exercises

- Modify the MindMap
- Update the Wireframe
- Change the Specification
- Update the Site Columns and Content Types





MindMap

- Find and open Envision Shakespeare Company Information Architecture.mmap
- Drag items under other items to reorganize
- Insert to add a new node
- Cursor left and right to move back up and add more nodes





Wireframe

- Find and open Envision Shakespeare Company Wireframes.rp
- Go to the News Layout
- Remove the Editor only fields (note that these are defined as a reusable block)
- Make the layout single column
- Remove the time from the Article Date
- Generate a prototype
- Review in the browser





Change the Specification

- Find and open Envision Shakespeare Company Functional Specification.docx
- Add an ESC Demo site column that is a single line of text
- Add the site column to the Base Page content type





Open the Visual Studio Project

- Find and open the Envision Shakespeare Company.sln in Visual Studio 2012
- Say No to TFS integration
- Update the Site URL for the two projects with http://c4968397007





Add a Site Column

- Right-click the ESC_Infrastructure project and Add Item
- Add a Site column named ESC Demo
- Open the new Elements.xml
- Copy the full Field tag
- Paste it into the existing Elements.xml
- Delete the new Site Columns files
- Set the name and group appropriately
- Save and overwrite





Add the Site Column to a Content Type

- Expand the Content Types folder
- Double-click the ESCNews content type
- Add the ESC Demo column
- Save and overwrite





Rebuild the Project

- Build Rebuild Solution
- Overwrite
- Right-click the ESC_Infrastructure project
- Publish
- Publish to C:\Users\Administrator\Downloads\Envision IT SharePoint 2013 Web Sites Training\Envision Shakespeare Company\Builder
 - Depending on where you downloaded the zip package
- Do the same for the ESC_Branding project





Setting up the Term Store

- Go to Central Admin
- Go to Manage Service Applications
- New Managed Metadata Service
- Set the following values
 - Name to Managed Metadata Service
 - Database Name to ManagedMetadataService
 - Create a new app pool ManagedMetadataService using SPFarm
- In Central Admin Services on Server, start the Managed Metadata Web Service



Site Build







Building the Site

- Navigate to the Builder folder
- Review the ShakespeareBuild_0_SetEnvironment.ps1
- Adjust the ShakespeareTaxonomy.xml
 - Search and replace LABVM\administrator with an appropriate owner account
- Right-click ShakespeareBuild_1_Complete.ps1 and run with PowerShell
 - Problem in some environments in the Structure step
 - Need to put a Pause before and wait a few minutes before executing





Review the Site

- Start out at <u>http://shakespeare.labvm12.envisionit.com/Page</u> <u>s/default.aspx</u> (nav is not wired up properly so the root redirect doesn't work)
- Go to Site Settings
- Review the Site Column and Content Type Galleries
- Look for the new site column
- Go to Site Contents
- Review the various lists and libraries





Manual Steps

- Term Store
- Anonymous Access
- Image Renditions
- Rollup Images for News
- Search Crawl
- Catalog Connections





Term Store

- Clean up the term store
 - Make sure there are no referenced terms in the Catalog term set
- Set the navigation for the site to the GlobalNav term set
 - Site settings Navigation
- Set the GlobalNav Term Set to be Available for Tagging
 - Allows the nav to be properly consumed by an anonymous user
- Set the sort order to custom, and clean up the sort order
- Customer the friendly URL for the Home page to be the root of the site (/)
- Fix the /Login page Refresh Global Navigation link to be /login?RefreshGlobalManagedNavigation=All
- Publish the page and click the link to refresh the nav





Anonymous Access

- Confirm in Central Admin that the web app has anonymous access enabled
 - Go to Manage web applications
 - Select the web app
 - Click Authentication Providers Default, and confirm that the Enable anonymous access is checked
- Turn on anonymous access in the site
 - Go to Site Settings
 - Select Permissions
 - Click Anonymous, confirm access to the entire web site, and uncheck the Requires Use Remote Interfaces Permission checkbox
- Turn off Anonymous access to the /login page
 - Navigate to the page
 - Page Permissions
 - Stop inheriting permissions
- Confirm anonymous access
 - Close all the browser windows
 - Open and confirm there is no ribbon or welcome menu
 - Navigate to /login to force the authentication to happen





Image Renditions

- Image renditions depend on the blob cache
- By default it is disabled
- Enable it in the web.config for the web app
 - Open in Notepad
 - Search for Blob (second occurrence)
 - Set the Enabled to true
- Define the Image Rotator rendition
 - Go to Site Settings Image Renditions
 - Add New Item
 - Image Rotator 1170 x 375





Rollup Images

- Currently the Populate script doesn't set the rollup images
- Manually edit the items in the News list to add rollup images to them





Full Search Crawl

- Run a full crawl
 - Go to Central Admin
 - Manage service applications
 - Search service app
 - Content sources
 - Edit Local SharePoint sites
 - Remove <u>http://c4968397007</u> and save
 - New content source
 - Name Shakespeare
 - Start address http://c4968397007
 - Pull down on Shakespeare
 - Select Start Full Crawl
 - Refresh until it completes





Create the Catalog Connection

- Go to Site Settings
- Manage catalog connections
- Connect to a catalog
- Connect News
 - Select the News term
 - OK





Configure the Category Page

- Navigate to /News
- Edit the page and web part
 - Set the number of items to 10
 - Select the display templates
 - Control_News
 - o Item_News
 - OK
- Publish the page





Add News to the Home Page

- Go to the home page and edit it
- Add a web part to Zone 2
- Content Rollup Content Search
- Edit the Web Part
- Change the query
- Items matching a content type
- Restrict by content type ESCNews (Show all content types first)
- Set the display templates
 - Control_NewsRollup
 - Item_NewsRollup
- Publish
- Note the display template needs to be fixed to point the Read all to /News





Configure the Catalog Item Page

- Get the Result Source GUID
 - Go to Site Settings Search Result Sources
 - Click on News Results
 - Get the Source ID from the URL
 - Change the %2D's to -
- Edit the page layout
 - Go to the mapped drive in Design Manager
 - Edit the CatalogItem-News.html file
 - Find SourceID
 - Replace the GUID with the one from above
- Publish the page layout in Design Manager
- Set the page layout for news items
 - Click on a News item
 - Edit the page
 - Change the page layout to Catalog-ItemNews
 - Publish





Search

- Add a page Search
- Change the page layout to home page
- Add a web part to Zone 2
 - Search Refinement
- Add a web part to Zone 3
 - Search Search Results
 - Search Search Box
- Edit the Search Results and Refiners web parts
- Publish
- This is not wired into the master page search yet
- Update the term store to not show this as a nav term



Creating Pages and Navigation

- Add a new page Test Pages
- Add another page Page 1
- Go to Site Settings Term Store Management

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- Find your new pages in the GlobalNav
- Move Page 1 under Test Pages
- Go to the login page and refresh the nav



Home Page Rotator

- Edit the Home page
- Add the Image Rotator web part
- Update the license file in the Style Library and publish it
- Go back to edit the web part
 - Set the Library URL
 - Set the Image Rendition ID to 5
- Publish the page
- Load another image into the Image Rotator library





Photo Gallery

- Add a Photo Gallery Page
- Change the page layout to ESC One Column
- Add the Photo Viewer web part
- Update the license file in the 14 hive layouts folder
- Edit the web part
 - Set the height to 600, turn off the chrome, library to PhotoGallery, set the Theme
 - Image renditions can be leveraged
- Publish the page





Wrap-Up

- Design Manager and HTML master pages, page layouts, and display templates rock
- Search and Term Store are key to WCM in SharePoint 2013
- Content Search Web Part is your new best friend





Products












- Easy delegation of user management to business
- Self-registration, approvals, forgotten password reset
- Single URL and sign-on for AD





Extranet Clients



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Microsoft SharePoint









Sample Architecture



SharePoint Web Front Ends



Office Web Apps Servers



SharePoint Application Servers





Clustered or Always On SQL Server





Public Web Sites and Extranets on SharePoint

- Public web sites are pure anonymous sites
- Extranets are sites that allow external users to authenticate to consume or contribute content securely
- These can be combined in a single site
- SharePoint is ideal for all of the above



Extranet Business Goals

- Reduce supply chain inefficiencies
- Interact with your loyal customer base
- Extend customer self service strategies
- Share business resources with partners
- Extend remote employee access





Extranet Scenarios

- Collaboration or Publishing Portal
- Internet Web Site Members Only Area
- Board of Directors' Portal





Collaboration or Publishing Portal

- Team sites for collaboration
- Publishing sites for private web content publishing





Internet Web Site Members Only Area

- Public web site with a private members area
- Forms-based authentication typically used to provide a rich login experience
- Self-registration with approvals typically provided





Board of Directors Portal

- Corporate or public sector board of directors portal
- Small set of users that are typically already part of the internal corporate domain
- SSL publishing of portal externally





Identity Management

- Process for managing the entire life cycle of digital identities, including the profiles of people, systems, and services
- For our purposes we are focused just on people
- Who creates and manages identities? The Extranet owner or the external users themselves?
- Are identities part of the Extranet or external to it?

Authentication and Authorization

- Authentication is the mechanism whereby systems may securely identify their users
- Authentication systems provide an answers to the questions:
 - Who is the user?
 - Is the user really who he/she represents himself to be?
- Authorization is the mechanism by which a system determines what level of access a particular authenticated user should have
 - Is user X authorized to access resource R?



Identity Options

Site Owned

- Active Directory
 - Corporate
 - DMZ
 - AD LDS
- SQL

External

- Social Identities
 - Windows Live ID
 - Google
 - Yahoo
 - Facebook
 - LinkedIn
- Active Directory
 Federation Services
- Azure Directory Services

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Four Categories of Users



Internal Users



Managed AD Users



Managed SQL Users



Federated Users







Site URLs

- Ensure that everyone is going to the same URL
- Don't extend the site or use AAM
- Having different URLs for internal and external users causes confusion, particularly with email links
- Breaks features such as alerts and workflow tasks
 - SharePoint doesn't know where to link people to

















AD vs. SQL

Active Directory

- Generally recommended that a separate AD forest is setup for the Extranet users
- May already exist in the DMZ to support the SharePoint farm
- Richer account policy control and audit capabilities

SQL

- No additional AD is required
- Standard Microsoft ASPNETDB database stores the credentials
- Encrypted passwords





WA vs. FBA

Windows Authentication

- Supports Classic mode sites
- An advanced web gateway such as Microsoft Forefront UAG or F5 BIG-IP is recommended
 - Friendly web form is still presented
 - Can be customized
 - Single sign on can happen across multiple systems

Forms Based Authentication

- Users can be stored in either SQL or AD
- Friendly, customizable web form for login
- Login with email address, even for AD users
- Requires a Claims mode site



FBA Claims Limitations

- Search Alerts
- SharePoint Server 2010 Explorer View
- Claims to Windows Token Service (C2WTS)
- InfoPath Forms Services
- Power Pivot







Home

Français

Login

Welcome to the Envision IT Extranet User Manager. To enter this area of the site you must be an authenticated user.

If this is your first time visiting, please Register Here before logging in.

Email		
Password		
	Login	
Forgot Password?		



PARTNERS FOR HEALTH

PARTENAIRES POUR LA SANTÉ

OSD

Log On		
User name:		
Password:		
Language:	English (en-US)	~

Log On

If this is your first time visiting, please Register Here before logging in.

Use the Forgot Password page if you need to reset your password.

This site is intended for authorized users only. If you experience access problems contact the <u>site administrator</u>.

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Extranet User Manager

Main Components

- Administration console
 - Used by IT to configure EUM
 - Used by the business to manage users and groups
- End User
 - Components that the Extranet users see
 - Login, disclaimer, change password, forgotten password
- Registration
 - Allow users to self-register
 - Support approval workflows

















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Pending Approval Email Pending Approval Email Pending Approver Email Welcome Email Forgot Password Email

Managed Domain EtwasPoint Site











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	Change My Settings		
	Change Password		



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Case Studies





Collaboration or Publishing Portal







Internet Web Site Members Only Area









Board of Directors Portal











Pricing

- \$8,000 per production SharePoint farm
- No limits on the number of web front ends
- 20% annual Software Assurance provides all product updates
- Dev and QA farm licenses provided as part of the production farm license




EUM Install

- Download the trial
- Cloudshare install guide is on our site
- Need to setup or have access to an SMTP Server
- Go through the install wizard for a SQL FBA install
- Copy the new license file
- Close the browser and relaunch the site
- Log in with your domain\username account and password
- Navigate to /LandingAdmin to add SQL users





Infrastructure Build







Infrastructure Build

- Farm Architecture
- Hosting Options (On-Premise, Azure, Third-Party)
- AutoSPInstall to install SharePoint
- http/https Publishing
- Claims and Forms-Based Authentication (SQL and AD)





Application Lifecycle Management







Purpose

- How do we build a solid SharePoint development environment for the enterprise?
- How do a number of developers work together on a SharePoint project?
- How does code and content move through a dev, test, and production lifecycle
- What is Agile and Continuous Integration, and why is it important?



Visual Studio and Team Foundation Server

- Visual Studio 2010 is the development platform for coding on SharePoint 2010
- Team Foundation Server integrates with Visual Studio to provide a repository for code, test, and other project artifacts
 - It facilitates teamwork by providing a common place for developers to work together





Provisioning SharePoint Farms

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AutoSPInstaller



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Provisioning SharePoint Farms

- Every developer needs their own complete SharePoint farm
- Teams need a dev integration farm to bring their work together on
- A full architecture needs QA and production farms as well





Developer VM Template

- Windows Server 2012 Standard
- SharePoint Server 2013 Enterprise
- Visual Studio 2012 Premium
- Office Developer Tools for Visual Studio 2012
- Office 2013 ProPlus
- SharePoint Designer 2013
- Fiddler
- SQL Server 2012 Standard





Creating a new Developer VM

- Open System Centre Virtual Machine Manager
- Create Virtual Machine
- Choose the Developer VM template
- Set the virtual machine name and options
- Create and start the VM





Creating a new Developer VM - Step 2

- Developer RDPs to their new VM
- Complete the SQL Server installation
 - Create the default instance
 - Set the service account(s)
 - Set the authentication mode and server administrators
- Update the AutoSPInstallerInput.xml file
 - Set the machine name for the default sites and database server
 - Set the service account passwords
- Run the AutoSPInstallerLaunch batch file
- Do a Health check review



Creating a new Developer VM - Step 3

- Start Visual Studio
- Connect to the Team Foundation Server
- Setup your workspaces
- Use a standard naming convention across your team
 - C:\Development\TFSCollection





Other Environments

- Dev Integration, QA and Production can all be built using AutoSPInstall
- Don't need or want the Visual Studio or Office tools on these servers
- We have a base template we use for dev integration servers
- QA should match the Prod architecture as closely as possible
 - High availability with load balancing, clustered SQL, app servers, DMZ, hardening, Internet publishing





Agile Development



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Agile with Team Foundation Server







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Creating Your TFS Project

- Open Visual Studio
- Make sure you are connected to the right Team Project Collection
- In Team Explorer, right-click the top collection and create a new Team Project
- Use the Scrum 1.0 template
- Go into the Areas and Iterations
 - Delete the extraneous releases and sprints
 - Create a product backlog iteration
- Start adding your stories and tasks



Continuous Integration







Continuous Integration

Team Foundation Server Administration C File Help	onsole		_ 🗆 >
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Automated Testing

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SharePoint Site Elements

- Site structure
 - Site columns, content types, subsites, lists, libraries
- Branding elements
 - Master pages, layouts, CSS, XSLT, supporting images
- Custom web parts
- Page and site content
- Web part instances
- Search
- Workflows
- Business Connectivity Services
- Managed Metadata





SharePoint Site Elements – Part 2

- Access, Excel, Word, Visio
- PerformancePoint
- Document conversions
- Timer jobs
- Secure Store Service
- User profiles





Site Structure

- Site columns
 - Define the fields that are used by content types
- Content types
 - Defines collections of site columns for different types of content
- Subsites
 - The hierarchy of sites that make up the site collection
- Lists and Libraries
 - The lists and libraries for each subsite



- Site columns and content types can be programmatically or manually created
 - GUIDs cannot be manually set, and code may need them to be consistent
- You can create them manually in SharePoint, save the site as a template, and import them into Visual Studio to create a proper WSP package
 - Not that difficult to author them in Visual Studio





Site Structure – Part 3

- Site structure can also be done either programmatically or manually
 - Many sites are complex and it is error prone to create manually
 - PowerShell scripting is ideal





Site Structure – Part 4

- For all site structure elements, changes can also be manual or programmatic
 - It is useful to be able to delete the whole site collection and recreate it programmatically
 - As soon as content starts being authored in SharePoint, it becomes difficult or impossible to do that
- After content authoring has started
 - Site column and content type changes need to be programmed explicitly (you can't just drop the content type and recreate it)
 - Site structure changes are usually done manually at this point
 - Should be scripted and tested
 - Changes need to be backed up and restored





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Branding Elements

- Web developers prefer to work in Design Manager
 - Faster to make and see changes
- Developer is free to make changes in their own VM
 - Working against a restored copy of the master site
- When they are ready to deploy, they package their files in a Visual Studio project
 - Results in a WSP solution file
 - This is deployed to the dev integration and other environments
- Developers never use Design Manager or SharePoint Designer against the master or dev integration sites





Branding Elements – Part 2

- Elements are typically in one of two modules in a branding feature
- Master page
 - Master Pages
 - Page Layouts
 - Display Templates
- Style Library
 - CSS
 - Images
 - JavaScript
 - XSL





Page and Site Content

- Page and site content is entered directly into SharePoint by the content authors
 - Web pages, images, PDFs, list content, etc.
 - This should be done in the master site separate from where dev integration is happening
 - Care needs to be taken with this site once authors start working
 - Make sure it is part of your production backup plan
- Periodically back it up and restore it to the dev integration and developer VMs
 - Can also script the content out for injecting into dev environments
- Ultimately it will be backed up and restored to the QA and production farms







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Web part instances

- Web parts ultimately get placed on pages
- The configuration of the web parts can often get quite complex
- You may want to disable editing of web parts for general content authors
- They end up in a grey zone between code and content



Web part instances – Part 2

- We created our own internal tool to export and import web parts
- Each web part's configuration can be exported into a .webpart file
- We scripted the extraction from the dev integration
- .webpart files are treated like code and checked into TFS for version control
- Script then applies the new .webpart files to the target environment





Search

- The <u>SharePoint Enterprise Search Migration Tool</u> was used to migrate between environments in 2010. You can download the tool <u>HERE</u>.
- Applies to: Microsoft FAST Search Server 2010 for SharePoint | Microsoft SharePoint Server 2010 | Microsoft Office SharePoint Server 2007
- For SharePoint 2013 our current approach is to document and manually implement search in each environment
- Again PowerShell scripting would be best




Workflows

- Workflows can be built using SharePoint Designer, Visual Studio, or third-party tools (Nintex or K2 primarily)
- Visual Studio workflow projects are automatically packaged as WSP solution files
 - Simply deploy the WSP file to the other environments
- SharePoint Designer workflows need to be deployed using SharePoint Designer
 - This means you need SPD access to production, which is not always possible
 - You can load the SPD workflow into Visual Studio to package it, but you lose the ability to edit it in SPD
- If you use third-party tools you'll need to define the process for that as well



Business Connectivity Services

- BCS can be built using either SharePoint Designer or Visual Studio
- Visual Studio BCS projects are automatically packaged as WSP solution files
 - Simply deploy the WSP file to the other environments
 - You can also export the BDC metadata model in the BDC service application
- SharePoint Designer doesn't create a WSP, and it doesn't make a complete BDC metadata model
 - You need to export and import using SharePoint Designer
- In both cases you still need to deal with connection and configuration information





Managed Metadata

- Microsoft supports exporting and importing of term store information
 - Doesn't support all of the term store properties
 - In particular the navigation properties are not supported
- We have created the MigrateManagedMetadata.exe to do a full migration
- Supports migrating at the Term Store or Group level





Future Directions

- Visual Studio Lab Management
 - Integrates the management of HyperV environments in with Visual Studio and Team Foundation Server
 - Can automate the provisioning of lab environments for automated testing
 - Test failures can snapshot entire environments to make reproduction of errors much easier



Summary

- You're going to have lots of SharePoint environments figure out how to build them quickly and repeatable
- Code and content often move in opposite directions through dev, QA, and Prod. Script and automate to keep this simple
- Agile is a great way to run projects
- Continuous integration with automated testing is key to its success
- There are lots of parts of SharePoint that you don't code through Visual Studio. Figure out how you move those through your environment



Links

- <u>http://blog.petercarson.ca</u>
- http://autospinstaller.codeplex.com/
- System Centre Virtual Machine Manager 2012 Beta <u>http://www.microsoft.com/download/en/details.aspx?</u> <u>id=609</u>
- Team Foundation Server 2010 <u>http://www.microsoft.com/visualstudio/en-us/products/2010-editions/team-foundation-server/overview</u>
- <u>http://urbanturtle.com/</u>
- <u>http://www.telerik.com/automated-testing-tools/</u>



Simcoe County District School Board







SCDSB – Agile Approach

2-week Sprints	Planning/Review Sessions at SCDSBDedicated Team
Team Members	 Product Owner/Stakeholders Scrum Master Developers
Sprint Planning	 Story Writing – with the full SCDSB team Task Decomposition – Development team
Team Foundation Server	Urban TurtleSCDSB can monitor progress
Sprint Review	DemonstrationRetrospective





SCDSB – Elementary Sites Overview

- Master Site
 - School List
 - School Name, Address, Phone Numbers
 - Admin Staff, Trustee
 - Region, Area, School codes
 - News Catalog List
 - Events Catalog List
 - Admin Page





SCDSB – Elementary Sites Overview

- Individual School Sites
 - School List (separate from master list)
 - Image Rotator
 - News
 - Events Calendar
 - Quick Access, Links
 - Custom content pages
 - Navigation





SCDSB – Pilot Site







SCDSB - Process



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Analytics







Analytics and SEO

- Setting up Google Analytics Tracking on your site
- Configuring the Google Analytics reporting
- Google and Bing WebMaster Tools
- SEO, 404 page not found, and redirects, why they are so important









