Sitecore Intranet Portal

A Quick Guide for Consultants and Developers

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Chapter 1

Walk-Through of Sitecore Intranet as a Consultant

This section outlines the typical questions a consultant needs to ask a customer in order to prepare for deployment of Sitecore Intranet Portal in an organization.

1.1 Overview of Intranet functionality

- Login page
- Functionality available on all pages
    1. Top menu
    2. Toolbar with shortcuts (Home, Sitemap, Calendar, Phonebook, Log out)
    3. Search function
    4. Right-hand column with personal area (available on all pages)
        - Edit profile
        - Updates – links to a page that lists updates to all pages this user has access to
        - Add favorites – links to the user's preferred pages on the intranet
- Front end editing – activated by clicking the pencil icon
- Intranet front page
    1. The front page consists of a number of "web parts", each extracting various kinds of information.
    2. There are various types of web parts available:
        - Standard web parts:
            - Pager: search for employees
            - Calendar: Activities and search function
            - Latest news
            - Teaser: Displays text and link to page
            - Canteen: Today's menu

- External web parts
  - Google search
- Custom – developed based on the customer's requirements

3. The web parts can be moved around by the users, thereby allowing personalization

- Administrators can lock web parts so that they cannot be moved and cannot be removed

4. The user can add new web parts from a "catalog" of web parts

- Administrators can control which web parts are available to which users by settings security rights

- Further functionality

1. Site map – shows the structure of the Intranet

2. Phone book – allows more detailed user search than the Pager web part.

3. Calendar – activities can be added and displayed.

- Please note that in the current version, activities MUST be created below /sitetools/activities to be displayed in the calendar.

- The calendar can be made available to employees:

  - Using the front page web part

  - Using the "ActivityList" page type. One or more activity types can be displayed.

4. Forum – A message board for posting and replying to messages.

5. Message board (tagwall) – message can be posted, but not replied to (contrary to the Forum)

6. Slideshow – Images can be uploaded and displayed as a slideshow

7. Blog – Simple blog functionality

8. Canteen – Multiple canteens can be created. For each canteen, menus can be maintained and displayed through the canteen web part.

9. Organizational diagram – Departments can be created and employees can be added to departments. By clicking on a department, the employees are listed.

1.2 Language management

- There are two kinds of languages for the Intranet (more information is available in the documentation on SDN):

1. A UI language, which is set for the user profile and controls all button texts, menu languages etc.

2. Content language – the language can be changed on individual pages using the content selector.

- The Intranet has a corporate language concept.

- The corporate language provides an easy way to make information available across languages without translating the content into each language.

- By filling out the "Corporate Title" field, the page will show up for all users, even in no content has been entered in the language chosen by the user.

- In that case, the corporate language version will be displayed

- Determine as early as possible which languages the solutions should support:

  1. Do NOT delete the English language, even If the customer does need it

     - Instead, hide the language node (or deny access to the node)

  2. Create extra languages needed

  3. Determine if all page types should exist in all languages or if they should by default be in the corporate language.

     - The difference is whether the whole solution structure is created in one or more languages from the beginning.

  4. Decide how the menu structure should look and how each page should be named (title for each language + which language is used for naming nodes in the structure)

     - If titles are not specified for all languages, it must be determined if Corporate Title should be specified (and for which menu entries)

  5. Determine if the language controls should be displayed (should the users be able to switch languages?)

  6. Determine if Corporate Title should be editable from front-end (is disabled as default)

1.3 Building the Information Architecture

- It is recommended to discuss the information architecture before implementing it in the solution

  1. A good way to do this is to sketch a site map (in whatever program you prefer), including the various sections (main menu items), sub pages and modules.

     - This is a valuable tool when starting to populate the content tree

     - For each node in the structure, specify

       - Item name

       - Page type/module (corresponds to templates in Sitecore)

       - Title (in each language)

       - Corporate Title (if used)

  2. Best Practise: Use English for item names, if English is a supported language.

- Decide which page types that you wish to be able to create in the different parts of the structure (by assigning the relevant Branches).

  1. The relevant branch will typically be:

- Intranet.Content – pure content page
- Intranet.DocumentList – content page with overview of sub menu items
- Intranet.DocumentListPaged – Same as the above Intranet.DocumentList, only split in several sub pages
- Intranet.DownloadList – content page with file list

2. Normally branches are assigned for each page type (for example that it should be possible to create 4 different types of pages below each Intranet.Content item)

- Make sure to identify any exceptions where a specific node in the tree should have a different set of branches than the standard

- Also, decide which modules to utilize:

1. Forum (you can create as many as you want)

2. Message Board (you can create as many as you want)

3. Slide Show (you can create as many as you want)

4. Blog (you can create as many as you want)

5. Canteen (can be moved to a different location)

6. Organizational Chart (can be moved to a different location)

7. Calendar (all activities must be created below the /Intranet/Home/Site tools/Activities node)

8. Phone Book (all user profiles must be stored below the /Intranet/Home/UserInfo node)

1.4 Configuring Security

- The Intranet Portal is taking advantage of the standard Sitecore security model, and security is managed using the standard Sitecore security tools

- The number of necessary roles should be determined:
  - Typical roles are "Management", "Administration" and "Employee". Each role may have its own set of rights (standard Sitecore security).
  - Are there areas of the intranet that some roles should not be allowed to access?

- Create users
  - For each user, create a corresponding Intranet.UserProfile item below the /Home/UserInfo node
    - The UserProfile item contains the information that is used by the Phonebook search page and the Pager web part
    - The name of the UserProfile item must match the username from the User Manager
    - If a UserProfile item is not created manually, it will be created automatically the first time the user log on to the intranet

- Notice that employees normally can edit their own profile

- It must be decided if they should be allowed to do this (and which fields they are allowed to edit themselves)

- It is possible to remove these fields, rename them and give them new types.
  - If field names are changed in Sitecore – or new fields are added – a developer must adjust the intranet to comply with the changes.
  - Making any extra fields searchable in the Pager or Phonebook applications requires custom development.

1.5   News and data channeling

News categories

- The Intranet can have unlimited news categories.
  - New categories are added by creating them in Sitecore under the "News" section.

- For each category there's an archive, where expired news items can be moved to.
  - For now, archiving is a manual task performed by the administrator, who must move the items to the folder.

Data channeling

- Data channeling is the feature that the user can subscribe to certain data channels (target groups) so only relevant news is shown to the user.
  - The target groups are selected on the news items when created.
  - Selecting "Publish to all" or not selecting any target groups on the news item means that the news item will be displayed to all users, regardless of the user's selected target groups.

- Users can filter what is displayed on list pages based on target groups
  - If "Mine" is chosen: News are shown based on data channel settings from the user's profile or settings from the specific news category. (This means that the user can override his/her general settings for individual categories)
  - If "All" is chosen: All news for the specific category is displayed. If the user wants to see all news on the intranet, he/she must select the main "News" menu item.

- Configuring target groups
  - Target groups are created below the "/Intranet/Site config/Target groups" node and can be hierarchical
  - Security (read+write) can be applied to target groups to control who can see them and/or publish to them

- Notice that data channeling is not limited to news.
  - All content can be tagged with target groups (by adding a targetgroup field to the template if it doesn't already contain one), and all list pages can be modified to allow the user to filter by target groups.

1.6 Styling the intranet (modifying the skin)

Sitecore Intranet Portal uses "skins" to control the visual aspects of the solution (colors, stylesheets, icons, etc.)

There are two typical approaches to styling the intranet

- Light-weight styling
    - o This kind of styling is recommended if a customer likes the overall look of the default skin (or is on a limited budget).
    - o Typically you will want to change
        - The top logo
        - The top images
        - Text colors
        - Gradients
        - The color of some of the icons (to match the other styles)
- Advanced styling
    - o Advanced styling can potentially affect any element of the site.
    - o Notice that anything that is not part of the skin (colors, stylesheets, icons) might be difficult or time-consuming to change, and might require custom development.
    - o Examples of what a customer might want changed:
        - Background images
        - Dropshadow
        - The top menu
        - Changing the structure and menu renderings
        - The styling of the web parts
    - o As these examples show, what a customer sees as "styling" might involve changes to renderings, web parts, etc. and thus require custom development.

When considering if (and how) to do advanced styling, keep in mind that the more customizations you make to the product, the more difficult and expensive it will be to maintain and upgrade the solution.

1.7 Typical customizations to Sitecore Intranet Portal solutions

- Adding fields to the user profile (or removing fields)
    - o Displaying these fields on the user profile page requires development, but is typically easy to do
    - o Making the fields searchable in the Pager web part and on the Phonebook page requires custom development.
- Custom web parts
    - o Typically displays content from various parts of the intranet

o Alternatively, displays content from other other IT systems (real-time or replicated)

Chapter 2

Walk-Through of Sitecore Intranet as a Developer

This section outlines the typical tasks that are relevant for developers when installing, configuring and customizing a Sitecore Intranet Portal solution.

2.1 Installing and upgrading Sitecore Intranet Portal

- Download the most recent setup.exe file for Sitecore Intranet Portal on http://sdn5.sitecore.net

- Make sure to install the newest patch to the product (typically takes ½-1 hours)

  o Read the readme file carefully and follow all the steps that are listed

- If the customer will be using the built-in Lucene search engine, be sure to install the relevant IFilter on the server – otherwise Office documents will not be indexed.

  o The IFilter can be installed by installing Microsoft Office or the MSN Search Toolbar

- Perform any steps that you normally perform when starting a new project

  o Create a Visual Studio web application project

  o Add the solution to your company's revision control system

  o Etc.

2.2 Upgrading Sitecore Intranet Portal

With regular intervals, Sitecore releases upgrades to the Intranet Portal.

- The upgrades will be released as patches that are relatively easy to install (unless the upgrade is a major release, where more work should be expected)

- The patches contain new features, bug fixes and performance improvements.

- Read the readme file carefully and follow all the steps that are listed

- If you are installing the patch into an existing Sitecore Intranet solution, make sure to make a backup of the database and customized files before installing the patch.

  o The patch might overwrite:

    ▪ Templates

- XSLT files

- aspx and ascx files

- The patch will NOT overwrite existing settings. It will only update field values, and only if the field still contains the original value.

- Tip: Have a look at the update XML file to find out which field values will be updated.

2.3 A note on Publishing

Sitecore Intranet Portal runs in "Live Mode", so the intranet reads data directly from the master database. This means that you don't have to perform any publish operations. When you update content, templates, etc., the changes will immediately take effect.

2.4 An overview of Sitecore Intranet Portal elements (database contents)

Sitecore Intranet Portal contains a lot of items in the database

- /sitecore/content/Intranet/Home
  - All content on the intranet is located below this node
  - Notice: This path is hard-coded in the current product – the intranet will stop working if you rename or move the "Intranet" and/or "Home" node

- /sitecore/content/Intranet/Home/UserInfo
  - All user profiles are stored below this node
    - Notice: In the current version of the product, user profiles are stored in a flat structure. This will be changed in future versions of the product to improve scalability.
  - By default, the Phonebook (and the Pager web part) requires user profiles to be stored in Sitecore.
  - If you are integrating with Active Directory (or other directory services), you must replicate the user profile information into Sitecore. Alternatively you'll have to implement your own Phonebook and Pager components.
    - You can find sample AD integration code for Sitecore Intranet on http://sdn5.sitecore.net (including code for replicating user profiles)

- /sitecore/content/Intranet/Home/Site tools
  - Various tools and resources use on the intranet
    - Activities/Calendar page
      - Notice: All activity items must be stored below this node
    - Search page
    - Sitemap
    - Vacation house signup
  - Pop-up windows (used by old front-end editor)
    - AddNewItem
    - AddNewPost

- CalendarPopup
- FileUpload
- IntranetMediaPicker
- Send to friend

- /sitecore/content/Intranet/Site config

  - Locations
    - Is used when assigning a location to a user profiles
  - Portal
    - Contains the web parts that will by default be shown in the portal
    - You can use Sitecore security to control access to web parts
      - Read permission: display web part
      - Write permission: user can move web part around
  - Settings
    - Is used to select which settings nodes you wish to use (MainSettings, Skin, WeblogSettings, etc.)
    - Notice: The settings nodes themselves are located below /system/IntranetSettings
  - Target Groups
    - Are use by the data channeling framework
    - Target groups can be created in multiple levels
    - You can use Sitecore security to control access to target groups
      - Read permission: user can select the group (and thus use this group to filter news lists etc.)
      - Write permission: user can select this group when creating/editing content (so that other users can filter by it)
  - Top icon links
    - The icons shown in the top menu (default: Home, Sitemap, Activity Calendar, Phonebook, Logout)
  - Document types
    - The recognized file types in DownloadLists (is used to display the correct icon next to the defined document types, based on their extension)
  - Activity types
    - The available activity types for the Activity Calendar
    - Notice: Currently, only one level of activity types is supported

- /sitecore/content/Intranet/UpdateIndex

  - In the initial release of Sitecore Intranet Portal, this section was used to keep track of recently updated pages.

- o The section is no longer used (since v2.0 rev. 070925) and should be deleted.
- /sitecore/layout
    - o Devices
        - ▪ The "Editor" device is used by the front-end editor
        - ▪ If no layout has been assigned for a template and a user tries to create that type of content from the front-end, he'll be redirected to the front-page
    - o Layouts
        - ▪ Intranet.FrontPage.aspx (used for the front page/portal)
        - ▪ Intranet.Main.aspx (used for all other pages)
    - o Renderings
        - ▪ Contains all xslt renderings used on the site (top menu, content, news, newslist, etc. etc.)
    - o Sublayouts
        - ▪ Contains all sublayouts for the solutions (forum, personalcontext, updatelist, newsarchive, etc. etc.)
        - ▪ Notice that some sublayouts are used as web parts in the portal (activity calendar, pager, newslist, etc.)
- /sitecore/templates
- /sitecore/system/IntranetSettings
    - o All the different types of settings are located here
        - ▪ MainSettings (used for configuration and localization)
        - ▪ Rich Text Profiles (used by the front-end editor)
        - ▪ Skins
        - ▪ WebLogSettings
        - ▪ WebPartSettings
- /sitecore/system/Modules/Web Parts
    - o Contain all the available web parts that the user's can add to their personal portal (by clicking the "Elements" button on the front page and then selecting "Shared Catalog")

2.5 An overview of Sitecore Intranet Portal elements (code and files)

- /bin (contains all the intranet-specific assemblies)
- /css/defaultstyles.css
    - o This file contains CSS classes that have been added to the product in the various patches after the initial release.
    - o Do NOT edit in this file! It will be overwritten in future patches. Instead, copy the definitions that you wish to change into your skin's CSS section.
- /intranetcontent/images

- o Most images are stored in sitecore, but the default stylesheets are referring to a couple of images in this folder.
- o The default "PortalStylesheet" contains references to the following images:
  - ▪ webpart_header_bg.gif
- o The default "Stylesheet" field contains references to the following images:
  - ▪ dots_vertical.gif
  - ▪ personligtomraade_bg_14x268.jpg
- o The rest of the images in this folder are used by the front-end editor
- /layouts (contain all aspx and ascx files)
  - o It is a good idea to create a subfolder for project-specific files
- /xsl (all xslt files)
  - o It is a good idea to create a subfolder for project-specific files
- web.config

Notice: The CSS definitions for the skin are stored in fields on the Skin item in Sitecore, not in physical files.

- To speed up development, consider to copy the CSS definitions to physical files and add references to them to the Intranet.Main.aspx and Intranet.FrontPage.aspx files.
- Before delivering the solution to the customer, copy the final stylesheets into the skin (and remove the hard-coded references in the aspx files).

2.6   Troubleshooting tips

Since the Sitecore Intranet Portal is built on top of Sitecore CMS, you can use all your usual procedures when troubleshooting problems.

While getting to know the product, the following hints might help you:

- Find out on which page the problem occurs
- Open the Content Editor in Sitecore
  - o Check if the layout has been set directly on the item. This is for example the case for "/Home/Organization" and several of the items in the "/Site tools" section (Activities, Search, Sitemap, Send to a friend).
- If the layout isn't set directly on the item
  - o Open the template (by selecting "Edit Template" on the "Configure" tab)
  - o Find out which layouts and sublayouts/renderings that are used
- Use Sitecore debugger if it isn't immediately obvious what happens on the page

2.7   Language considerations

It is important to consider what languages are needed before building the entire site structure and before creating custom templates, branches, etc.

- Do NOT delete the English language, even If the customer does need it

- o Instead, hide the language node (or deny access to the node)
- The intranet is available in English by default, and almost all strings (except for example branch names) are also available in Danish by default.
  - o Translating the intranet to a new language can be time-consuming
  - o Remember the following areas when translating
    - /system/IntranetSettings/MainSettings/*
    - /system/IntranetSettings/Skins/*
    - /system/IntranetSettings/WebLogSettings/*
    - /system/IntranetSettings/WebPartSettings/*
    - /system/Modules/Web Parts (web parts)
    - /content/Site config/Portal/* (web parts)
    - Field titles for all relevant templates
    - Etc.
- When creating the content structure, make sure you have selected the language that the customer will use as their primary language

2.8 Customizing terms

- Most strings are stored in the MainSettings node
- Some strings are stored in the Skin (including ALT texts and titles for images)
- When implementing a new solution, remember to change the following strings
  - o MainSettings
    - Browser title
    - Footer
  - o Skin
    - LoginBody

2.9 Customizing User Profiles (adding new fields)

In the current version of the product, it's easy to add new fields to the UserProfile template and displaying the on the user's profile page.

- Add the relevant fields to the Intranet.UserProfile template
  - o Put a checkmark in the "Is Editor Enabled" checkbox for all fields where the users are allowed to edit the information themselves (select the template field, scroll to the section at the bottom)
- If you wish to localize field labels, add the relevant number of fields to the MainSettings template (below the "dlheader" field).
- Modify Intranet.Employee.xslt to show the new fields (and to use the new labels)

Making the fields searchable or displaying them in the Pager or in the Phonebook's search results is however not trivial and requires custom development:

- If you haven't already done so, download the available source code for the product

- Copy the "Intranet.Phonebook.ascx" files (ascx, ascx.cs, ascx.designer) to your project-specific folder

- Change the namespace in all 3 files from "Sitecore.Intranet.layouts" to match your usual project namespaces

- Create a sublayout node in Sitecore and set the path to your new sublayout
    - o Change the layout for the Intranet.Employee template to use the new sublayout

- Follow the same steps for the Intranet.WebPart.Pager.ascx, including creating a new sublayout node for the Pager web part
    - o Locate the Pager web part (default location: "/Site config/Portal/FrontPage.ZoneLeft.Pager")
    - o Enter the ID of the new sublayout into the "Reference to Web Part" field)

2.10 Introduction to the front page (personal portal)

- The default layout of the portal is defined in "/Site config/Portal"
    - o Contains the web parts that will by default be shown in the portal
    - o Each folder name corresponds to a zone in the portal
        - ▪ If you create new zones or rename existing zones, you must make the change in Sitecore as well as the Intranet.FrontPage.aspx file
        - ▪ You can freely change the sort order of the zones
    - o You can use Sitecore security to control access to web parts
        - ▪ Read permission: display web part
        - ▪ Write permission: user can move web part around
    - o You can move web parts between zones

- Additional web parts are defined in "/sitecore/system/Modules/Web Parts"
    - o These web parts will not be displayed in the portal by default
    - o The user's can add the web parts to their personal portal (by clicking the "Elements" button on the front page and then selecting "Shared Catalog")
    - o You can use Sitecore security to control access to web parts
        - ▪ Read permission: can add (and display) web part

2.11 Styling the intranet – step by step

When styling the intranet, most of the icons and colors can be changed on the relevant Skin item in Sitecore. There are, however, some resources in the product that currently have to be changed in other places.

Notice: Pay attention to "unshared" fields when changing the skin

- When changing icons in the skin, some of the fields are "unshared"

- - This is typically if the ALT text of the image may contain localized text
- Be sure to update such fields in all languages
  - Also, check if there is an ALT text for the image and translate it if necessary
- Tip: One way to copy all images to a different language is to use "Export language" (in the Control Panel > Globalization) and export the main settings node in the relevant languages. Open the XML file in Excel and copy the values to the other languages and modify any ALT texts. Extract an updated XML file from Excel and import it into Sitecore.

Styling the intranet typically requires you to make changes in the following areas:

- /sitecore/system/IntranetSettings/Skins/*
  - PrintIcon
  - TopSearchbuttonImage
  - AddNewItemIcon
  - FrontpageLinkImage
    - LoginBackgroundImage
  - Stylesheet section
    - FrontendEditingStylesheet
      - Defines the visual appearance of the front-end editor
      - Notice: This field is NOT used to define the styles that are used by rich text fields (this is controlled by the WebStylesheet setting in the web.config file)
    - PortalStylesheet
      - Defines various styles for the portal (the front page)
    - Stylesheet
      - Defines the primary stylesheet, see notes below.
- /sitecore/system/IntranetSettings/MainSettings/*
  - Top logo
  - PrintLayoutBody (contains a logo by default)
  - Icon: AddNew
  - Icon: Edit
- /sitecore /content/Intranet/Home
  - Top right image
  - Notice: You can also define "top right images" on items that are based on the Intranet.Section template
- /sitecore/content/Intranet/Site config/top icon links
  - Set the icon for each top icon link (Home, Sitemap, Calendar, Phonebook, Log out)

2.11.1 Customizing the stylesheets

- You typically want to change the following styles (in the "Stylesheet" field):
    - The styles used in the header of the page
        - .TopDateCell (1/4 down the stylesheet)
        - .AdvancedSearchLink (3/5 down the stylesheet)
        - .TopSearchField (1/4 down the stylesheet)
            - Change the border to match the rest of the colors
    - Submenu arrow
        - ul#submenumain li submenulinkon (4/5 down the stylesheet)
        - ul#submenumain li submenulinkoff (4/5 down the stylesheet)
    - Horizontal line at the top and the bottom
        - .MainBottomCell (2/3 down the stylesheet)
        - .maintable (2/3 down the stylesheet)
    - Top menu background
        - .maintabletopmenucell (2/3 down the stylesheet)
- Also, you typically want to adjust the text colors (in the "Stylesheet" field)
    - .maintabletopcell (2/3 down the stylesheet)
    - Login box
        - .LoginBodyCell
        - .LoginText
        - .LoginTextSmall
        - .LoginField (often darker since it is the color of text in input fields)
    - The headline of TopNews1 web part is defined in the "PortalStylesheet"
        - DIV.WebPartContentTopNews1Header

Notice: when new stylesheet classes are added in patches to Sitecore Intranet Portal, they will be added to the following file: /css/defaultstyles.css

- If you want to customize these classes, copy them to the "Stylesheet" field of your own skin
- This file might be overwritten without notice in future patches