School of Medicine Guide to New Web Design
# Vendor Engagement Process

<table>
<thead>
<tr>
<th>Vendor Engagement Phase</th>
<th>Supporting Documentation</th>
<th>Involved Parties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Planning / RFP</strong>&lt;br&gt;This level involves determining the project goal and running a feasibility study amongst the client and web development services, taking into consideration various factors like project cost, equipment cost, practicality etc.</td>
<td>RFP Template</td>
<td>Client / Vendor</td>
</tr>
<tr>
<td><strong>System Requirements Analysis / Scope</strong>&lt;br&gt;Refinement of project goals into defined functions and operations of the proposed application through intensive discussion between web development services and the client is achieved through this step.</td>
<td>Drupal Development Guide&lt;br&gt;SOM Branding Guide&lt;br&gt;SOM Templates / Wireframes</td>
<td>Vendor / DHTS Technical Representative</td>
</tr>
<tr>
<td><strong>System Design</strong>&lt;br&gt;Documentation of various details like operations and functions such as screen layouts, process diagrams and other documentation are done here.</td>
<td>Drupal Development Guide</td>
<td>Client / Vendor / DHTS Technical Representative</td>
</tr>
<tr>
<td><strong>Implementation / Coding</strong>&lt;br&gt;This is where the expertise of web development services are needed the most when actual back end coding is done.</td>
<td>Drupal Development Guide&lt;br&gt;HTML Template files</td>
<td>Vendor</td>
</tr>
<tr>
<td><strong>Testing</strong>&lt;br&gt;In this phase the product is put through various testing environments and tools designed and used by web development services to make the product to remove its bugs and errors to ensure harmonious execution.</td>
<td>Vendor Supplied Test Plan&lt;br&gt;SharePoint Vendor Portal</td>
<td>Vendor / Client</td>
</tr>
<tr>
<td><strong>Acceptance / Deployment</strong>&lt;br&gt;Finally the web development services deploy and install the system after getting formally approved by the client.</td>
<td>Based on agreed upon release schedule and DHTS Change control Policies</td>
<td>Vendor / DHTS System Admin</td>
</tr>
<tr>
<td><strong>Non Environmental Site Maintenance</strong>&lt;br&gt;The web development services not only make sure the installation of the application but they are also responsible for subsequent maintenance and upgrading if and when needed.</td>
<td>Service Contract</td>
<td>Vendor / Client</td>
</tr>
</tbody>
</table>
1.1 Process Chart Description

A. Project Planning / RFP

<table>
<thead>
<tr>
<th>Task</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer completes New Web Site Request in Service Now</td>
<td>Customer</td>
</tr>
<tr>
<td>Customer completes / sends out RFP and Vendor Development package</td>
<td>Customer</td>
</tr>
<tr>
<td>SOM / DHTS Web Services review RFPs</td>
<td>Customer / SOM / DHTS</td>
</tr>
<tr>
<td>Vendor selected / on boarded. Accounts created</td>
<td>Customer</td>
</tr>
<tr>
<td>Domain request(s) made</td>
<td>Customer</td>
</tr>
</tbody>
</table>

B. System Requirements Analysis / Scope

<table>
<thead>
<tr>
<th>Task</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor reviews provided technical documentation</td>
<td>Vendor</td>
</tr>
<tr>
<td>DHTS Web Services provides additional information through technical discussion with vendor</td>
<td>Vendor / DHTS</td>
</tr>
<tr>
<td>Vendor accesses development repository</td>
<td>Vendor</td>
</tr>
</tbody>
</table>
## C. System Design

<table>
<thead>
<tr>
<th>Task</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor releases / customer reviews prototype(s)</td>
<td>Vendor</td>
</tr>
<tr>
<td>Vendor accesses development repository</td>
<td>Vendor</td>
</tr>
</tbody>
</table>

## D. Implementation / Coding

<table>
<thead>
<tr>
<th>Task</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor local development begins</td>
<td>Vendor</td>
</tr>
<tr>
<td>Vendor checks in code, DHTS deploys to network</td>
<td>Vendor / DHTS</td>
</tr>
</tbody>
</table>

## E. Testing

<table>
<thead>
<tr>
<th>Task</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor creates and releases test / remediation plan</td>
<td>Vendor</td>
</tr>
<tr>
<td>Vendor and client test site</td>
<td>Vendor / Customer</td>
</tr>
<tr>
<td>Vendors validate code, request check in to staging, DHTS deploys to staging</td>
<td>Vendor / DHTS</td>
</tr>
</tbody>
</table>

## F. Acceptance / Deployment

<table>
<thead>
<tr>
<th>Task</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor completes change request for deployment</td>
<td>Vendor</td>
</tr>
<tr>
<td>Vendor and client provide test results and validation</td>
<td>Vendor / Customer</td>
</tr>
<tr>
<td>DHTS represents change to Change Control Board</td>
<td>DHTS</td>
</tr>
<tr>
<td>DHTS deploys to production</td>
<td>DHTS</td>
</tr>
<tr>
<td>Vendor / customer validate</td>
<td>Vendor / Customer</td>
</tr>
</tbody>
</table>

## G. Non-Environmental Site Maintenance

<table>
<thead>
<tr>
<th>Task</th>
<th>Responsible Party</th>
</tr>
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</table>
### 1.2 Vendor Package

The following archive [http://medschool.duke.edu/files/branding/SOM-development-package.zip](http://medschool.duke.edu/files/branding/SOM-development-package.zip) provides everything that a vendor should need in order to begin the proposal process. It contains:

- School of Medicine template Photoshop documents
- School of Medicine Drupal HTML theme and supporting files
- Drupal Development Guide detailing the DHTS hosting environment and development process
- School of Medicine Branding Guidelines
- School of Medicine wireframes

### 1.3 Duke School of Medicine Sample Vendor List

The following list simply provides some suggestions for Duke-approved vendors who provide web development services. This list is in no way intended to be exclusive or comprehensive. It is meant merely as a reference guide.

- **Coalmarch**
  (Jason Stanley)
  Jstanley@coalmarch.com

- **Duke Web Services**
  (Ryn Nasser)
  ryn.nasser@duke.edu

- **Komplex Creative**
  (Tobias Rose)
  Tobias@komplekscreative.com

- **New Media Campaigns**
  (Clay Schossow)
  cschossow@newmediacampaigns.com

- **Signal Design**
  (Rick Haynes)
  rhaynes@signalinc.com

- **Design Hammer**
  (David Minton)
  david@designhammer.com

- **BP Studios**
  (Drew Robison)
  drewr@bpstudios.com

- **COCG**
  (Andy Waldrop)
  awaldrop@cocg.co

- **Verified Studios**
  (Adam Shultz)
  AdamS@verifiedstudios.com

- **Rivers Agency**
  (Lauren Rivers)
  lauren@riversagency.com

### 2 Vendor Access to the DHTS Development Environment

Once a vendor has been selected, they will need access to the Duke University Health System network. This requires the following:

- Sponsored guest accounts for all developers that will be working in the DHTS Drupal environment.
• Request for Duke Medicine network access.
• VPN access the DHTS Web Services
• SSH keys provided by vendor to DHTS Web Services once network and VPN access have been established.

Each of these items must be in place prior to development and should be reflected in the project plan.

2.1 Sponsored Guest Accounts

Sponsored guest accounts may be granted to contractors and external research collaborators. The sponsored guest account will grant the guest access to Duke University and Duke Medicine IT resources, which may include a Duke NetID, email account, DukeCard or other services.

Guest accounts should be requested by the customer and are requested via this form on the OIT Service website: https://idms.oit.duke.edu/affiliates/sponsor Once in the form:

The option for Long-term collaborator should be chosen. This will open additional option as detailed in the screen capture below. At the very least, Duke NetID and Duke Medicine DHE account need to be selected in order to ensure Duke Medicine Network access.

![Screen Capture of Guest Account Form]

Once the guest account has been granted all intended recipients will receive an email notifying them of the request made on their behalf with instructions on how to complete the process.
2.2 Duke Medicine VPN Access
Once verification of a guest account with Duke Medicine access has been established, Web Services may be contacted by either the customer or vendor to be granted VPN access through a service now request. Each guest account requires individual access.

2.3 SSH Keys to access the DHTS Web Services hosting environment.
SSH keys are a way to identify trusted computers, without involving passwords. These are required to be provided by the vendor in order to access the DHTS Web Services Drupal hosting environment in order for development to take place.

3 Drupal Build

3.1 Platform Features
Core: Aquia Drupal 7.26 Multi-Site Configuration

- Shibboleth managed by Duke for managed DHE accounts.
- No external authentication at this time.
- Content Management (ability to change navigation links, banners, center content, adding right side bars, content in the right side bars, new pages)
- Authentication with DHE Active Directory for Content Editors
- Site Search (Google Custom Search)
- Simple Web Forms (non SEI data to be sent through the emails, no workflow)
- Google Analytics tracking code and access to self-serve reports

Note the following constraints for any content editor:

- No access to module code or to core code
- No access to Drupal administration
- No access to user permissions
3.2 Architecture

- Delivery of the site as per the specifications and proposal
3.3 Authoring System

Items (nodes) are created and updated on the authoring system allowing a single SSL certificate to service multiple domains. Public facing domains generally do not have SSL certificates.

Some nodes contain items such as images, video, and pdfs which are not stored in the database but rather the filesystem. These items are replicated from the authoring system to the content systems. Defined items dynamically created on the content system are optionally replicated to the authoring system.
Varnish caches store cacheable contents and serve non-cached items from any available content servers.
Solr master replicates search content to multiple Solr read-only search systems.
4 Roles and Responsibilities

4.1 Site Owner Responsibilities

- RFP, development & support contract with vendor
- Demonstration of ability to perform common tasks with the CMS and verification of the template and styles, immediately following training
- Domain requests either through Duke University OIT or third party resources are the sole responsibility of the customer.
- Content population (input) and page layout; Drupal does not have functionality to pull in data automatically from other sources. It is incumbent on site editors to use the tool provided to strip out extraneous code from source content to prevent display errors.
- Proficiency with Word page layout and formatting is desirable. Proficiency with an image editor is desirable.
- Training of new editors, post-launch
- Provision of DHE-domain Active Directory accounts for editors (work with your local IT Admin)
- Designating an in-house support person to troubleshoot editor questions
- Content accuracy & validation
- Provision of photo and image files and image editing software
- Management of a hosting account on media servers, as necessary
- Backup storage of document and image files on local drive; deletion of un-used files from the server – Note: files accidentally deleted cannot be recovered.
- Posting only public information; information targeted to internal Duke users must be posted on the separate Intranet SharePoint platform and is outside the scope of this project Adherence to Web Policies and Standards, which provide guidelines for site owners and editors in managing and administering Duke-hosted web sites; no PHI or SEI is allowed
- Approvals at key intervals from key stakeholders and coordination of any user testing prior to launch
- Collaboration, through a single, designated point of contact, with vendor staff resources

4.2 DHTS Web Services Group Responsibilities

- Integrity of web platform
- Functionality of the core code, template, admin pages, WYSIWYG editor and Flash features
- One group training session, and documentation, on use of the CMS
- User permissions (roles) on client request
- Server performance under our direct control (exclusive of network, infrastructure outages)
- Adherence to Duke Information Security Office technical policies and standards
- Domain name registration and/or redirects, and launch
- Hosting environment

4.3 Secured Internal Content or Intranets

Public web sites built with Drupal platform will not host any secured internal content or contain any other restricted areas requiring a log in. DHTS Web Services will work with clients on a case by case basis who require this type of functionality.
4.4 A word about Domain Names
Duke domain names are owned and managed by Duke University OIT. To request a third level domain, ie. something.duke.edu requires a service ticket be opened with the OIT service desk through service now. Requests must be vetted and justified. The process can take in excess of 60 days. This should be accounted for in any project plan.

Moving domains from OIT to Duke Medicine also requires a service request to OIT and usually take 7-10 business days to complete.

Domains purchased through third party vendors are exclusively managed by the customer.

4.5 Issues Outside of Scope
The following issues are not included in the scope of this project:

- Content generation (writing, editing, provision of images or of multimedia)
  - Image sources: Duke Photography or free, online stock images
  - Video production: Duke Media Services
- Training in media production or manipulation
- Testing and validation of independent sites. DHTS supports the hosting platform only.
- Acquisition of domain names and aliases
- Acquisition of user account on OIT streaming server or Events@Duke (as applicable)

Intranet (restricted) content Issues Outside of Scope
The following issues are not included in the scope of this project:

- Content generation (writing, editing, provision of images or of multimedia)
  - Image sources: Duke Photography or free, online stock images
  - Video production: Duke Media Services
- Training in media production or manipulation
- Acquisition of user account on OIT streaming server or Events@Duke (as applicable)
- Intranet (restricted) content
- Theme, custom module and custom application support and maintenance

5 Deployment / Non Environmental Maintenance

5.1 Git Repository
Source code repository:

Source code and configurations are stored in a git source code repository. Each website is configured with its own git repository. Further repositories for additional breakout of common functions can be discussed further on a case by case basis.

Each repository shall be associated with a designated approver. Requests for access, as well as level of access, shall be approved by this individual. This individual is additionally responsible for notifying the git system administrator when access shall be removed as well verifying access lists on a periodic basis.

Access to the source code repository is based on ssh keys provided to the system administrator.
Sample git clone:
git clone git@vml-wsscm01.dhe.duke.edu:/repository.git

5.2 Change Management
The Change Management process aims to improve and maintain service quality, providing a structured approach to managing and implementing changes in IT Infrastructure and Systems. The actions to achieve this include the requirement to document, test, schedule, approve, report and monitor all changes. The process must evaluate achievement of customer expectations and take steps to improve or modify changes accordingly.

The primary objective of Change Control is to protect the live production environment. The Change Management process helps organizations understand and work to minimize risks of changes to the IT environment. A Change is the addition, modification, or removal of anything that could have an effect on IT services. The scope of changes include IT services, configuration items, architecture, processes, tools, metrics and documentation.

5.3 Change Management Benefits
The value of following our Change Management process includes:

- Protecting the business, and other services, while making required changes.
- Reducing failed changes and therefore service disruption, defects and re-work.
- Contributing to meet governance and audit requirements by providing auditable evidence of changes.

5.4 Change Meetings and Deadlines

<table>
<thead>
<tr>
<th>Group</th>
<th>Meetings</th>
<th>Submission Deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duke Medicine Change Advisory Board</td>
<td>Mondays 10:00-11:00 am, Wednesdays 3:00-4:00 pm</td>
<td>by Thursday, 10:00 am, by Monday, 3:00 pm</td>
</tr>
<tr>
<td>Maestro Care Non-Production Change Control Board</td>
<td>Tuesdays and Thursdays 2:00-3:00 pm</td>
<td>by 9:00 am on day of the meeting</td>
</tr>
<tr>
<td>Maestro Care Production Change Control Board</td>
<td>Tuesdays and Thursdays 3:30-4:30 pm</td>
<td></td>
</tr>
</tbody>
</table>

5.5 Vendor Release Management
DHTS Web Services provides a SharePoint site for vendors that details releases, provides technical documentation and a library for test plans and validation. Alerts can be set up to track releases and patches pushed by Web Services. It is the responsibility of the customer to negotiate continued maintenance of their website(s) to include provisions for the vendor to track, test, validate and maintain their supported website(s) to remain in compliance with platform security releases and patches.

Regardless of vendor platform, DHTS Web Services will exclusively use this portal to schedule, notify and accept test plans and validations. Please note that this site is internal and thus accessible exclusively through the Duke Health System network.
6 Reference Guide

6.1 Resources

- Duke Service Now https://duke.service-now.com/
- Sponsored Accounts through DUKE OIT https://idms.oit.duke.edu/affiliates/sponsor
- School of Medicine Vendor Development Package http://medschool.duke.edu/files/branding/SOM-development-package.zip
- DHTS Web Services SharePoint Vendor Portal https://intranet.dm.duke.edu/dhts/cto/webservices/drupaldev/SitePages/Home.aspx

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