Life Cycle Plan (LCP)

Somatis Web and Data Services

Team 3

Name	Roles
Fall 2012	
Fei Qu	Project Manager
Jizhou Lu	Life Cycle Planner, Operational Concept Engineer
Xianan Fan	Prototyper
Dian Peng	Architect, Feasibility Engineer
Qiuyang Liu	Requirements Engineer
Jordan Padams	IIV&V
Spring 2013	
Jordan Padams	All

4/10/13

Version History

Date	Author	Version	Changes made	Rationale
10/03/12	JL	1.0	Original template v1.0	Initial draft to plan life cycle
10/10/12	DP	1.1	Updated section 2.0 Updated section 3.3	Fix problem for this document
10/15/12	FQ	2	Updated section 3.3	Make skills more concrete.
10/22/12	FQ	2.1	Updated section 2.0, 3.0 and 4.0	Write LCP for valuation phase
10/29/12	FQ	2.2	Updated section 2.0, 3.0 and 4.0	Change the document structure, update foundation phase related content, fix problems in Approach section.
10/31/12	FQ	2.3	Updated section 5.0.	Add the resource estimation part.
11/05/12	FQ	2.4	Updated section 3.2 and 5.0.	Add the roles and responsibilities for development phase. Update the COCOMO analysis based on the feedback from ARB.
11/26/12	FQ	3.0	Updated section 1.0-3.0, added section 6.0	Add the plan for Rebaselined Foundation Phase and Development Phase.
2/11/13	JP	4.0	Updated all sections.	Loss of team members and introduction of COTS product
4/9/13	JP	5.0	Updated 6.2	Completion of CCD

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1 Introduction

1.1 Purpose of the LCP

Life Cycle Plan lists milestones and products, showes team members' responsibilities, record approches we use to control progress and estimates the cost of the project.

1.2 Status of the LCP

Version 4.x includes updates for RDCP including responsibilities, skills, monitoring and control, resources, and capabilities due to the loss of team members and the introduction of COTS product.

1.3 Assumptions

- The duration of the project is 24 weeks, which are 12 weeks in Fall 2012 and 12 weeks in Spring 2013.
- The team consists of 5 on-campus students and 1 DEN student in Fall 2012, and 1 DEN student in Spring 2013.
- Each team member has strong computer programming background.
- The team and the client keep efficient communication.

2 Milestones and Products

2.1 Overall Strategy

Somatis Web and Data Services system followed the Architected Agile process for the Exploration, Valuation, and Foundation phases. During the the Rebaselined Foundations, a NDI solution was found for the data services portion of the project, and over 80% workforce was lost. Due to these developments, the team has transitioned to NDI-intensive processes for the Rebaselined Foundations, Development, and Operations Phases.

Exploration Phase

Duration: 09/12/12- 10/08/12
Concept: We identify project requirement, make determine life-cycle plan. Through the weekly meeting with client, we negotiate the system requirements and contribute idea on the project.
Deliverables: Valuation Commitment Package
Milestone: Valuation Commitment Review
Strategy: Incremented Commitment Model for Architected Agile Process

Valuation Phase

Duration: 10/09/12- 11/05/12
Concept: We will identify all the operational concepts; make the prototype for both configurator and sensor data parser; write use cases and do feasibility analysis.
Deliverables: Foundation Commitment Package
Milestone: Foundation Commitment Review
Strategy: Incremented Commitment Model for Architected Agile Process

Foundations Phase

Duration: 11/03/12- 12/12/12
Concept: Design system architecture, improve prototypes based on feedback from the client, plan for the development phase.
Deliverables: DC Package
Milestone: Development Commitment Review
Strategy: Incremented Commitment Model for Architected Agile Process

Rebaselined Foundations Phase

Duration: 01/14/13- 02/13/13
Concept: Rebaseline project status, prepare for development phase, plan for testing, plan and manage project.
Deliverables: Rebaselined Development Commitment Package
Milestone: Rebaselined Development Commitment Review
Strategy: Incremented Commitment Model for Architected Agile Process

Development Phase

Duration: 02/14/13- 05/02/13
Concept: Plan and manage project, assess development iteration, perform core capabilities

drive-through, implement the system, perform testing, assess traceability matrix, develop support plan, develop transition plan, develop user manual.
Deliverables: Transition Readiness Review Package, Support and Transition Set Package
Milestones: Alpha Delivery, Beta Delivery, Core Capability Drivethrough, Operations Delivery, Transition Readiness Review
Strategy: Incremented Commitment Model for Architected Agile Process

2.2 Project Deliverables

2.2.1 Exploration Phase

Table 1: Artifacts Deliverables in Exploration Phase

Artifact	Due date	Format	Medium
Client Interaction Report	9/19/2012	.doc, .pdf	Soft copy
Valuation Commitment Package • Operational Concept Description (OCD) Early Section • Life Cycle Plan (LCP) Early Section • Feasibility Evidence Description (FED) Early Section	10/03/2012	.doc, .pdf	Soft copy
Evaluation of Valuation Commitment Package	10/08/2012	.xls	Soft copy
Project Effort	Every Monday	Text	ER system
Project Plan	Every Wednesday	.mpp, .pdf	Soft copy
Progress Report	Every Wednesday	.xls	Soft copy

2.2.2 Valuation Phase

Table 2: Artifact deliverable in Valuation Phase

Artifact	Due date	Format	Medium
Foundation Commitment Package • Operational Concept Description (OCD) All Sections • Prototype (PRO) All Sections • System and Software	10/15/12	.doc, .pdf	hard copy, soft copy

Architecture Description (SSAD) Early Section • Life Cycle Plan (LCP) Sections 1-5 • Feasibility Evidence Description (FED) Sections 1-5 • Supporting Information Document (SID) All Sections			
Evaluation of Core FC Package	10/22/12	.xls	Soft copy
Draft FC Package	10/22/12	.doc, .pdf	Soft copy
Response to Evaluation of Core FC Package	10/24/12	.doc, .pdf	Soft copy
Evaluation of Draft FC Package	10/26/12	.xls	Soft copy
Response to Evaluation of Draft FC Package	10/26/12	.doc, .pdf	Soft copy
Quality Management Plan	10/26/12	.doc, .pdf	Soft copy

2.2.3 Foundations Phase

Table 3: Artifact deliverable in Foundations Phase

Artifact	Due date	Format	Medium
FC Package	11/05/12	.doc, .pdf	Soft copy
Progress Report	Every Wednesday	.xls	Soft copy
Project Plan	Every Wednesday	.mpp	Soft copy
COTIPMO	Every Wednesday		Soft copy
Evaluation of FC Package	11/12/12	.doc, .pdf	Soft copy
Response to Evaluation of FC Package	11/14/12	.doc, .pdf	Soft copy
QMP#2	11/19/12	.doc, .pdf	Soft copy
Draft DC Package	11/26/12	.doc, .pdf	Soft copy
Evaluation of Draft DC Package	12/03/12	.doc, .pdf	Soft copy
DC Package	12/10/12	.doc, .pdf	Soft copy
Response to Evaluation of Draft DC Package	12/10/12	.doc, .pdf	Soft copy

2.2.4 Rebaselined Foundations Phase

Table 4: Artifact deliverable in Rebasedlined Foundations Phase

Artifact	Due date	Format	Medium
Draft RDC Package • OCD • SSAD • UML • LCP • FED • SID • QMP • TPC • TP	02/11/13	.doc, .pdf	Soft copy
RDC Package • OCD • SSAD • UML • LCP • FED • SID • QMP • TPC TP	02/20/13	.doc, .pdf	Soft copy
Evaluation of RDC Package	03/04/13	.doc, .pdf	Soft copy
Progress Report	Every Wednesday	.xls	Soft copy
Project Plan	Every Wednesday	.mpp	Soft copy
COTIPMO	Every Wednesday		Soft copy

2.2.5 Development Phase

Table 5: Artifact deliverable in Development Phase

Artifact	Due date	Format	Medium
IOC #1	03/31/13	.doc, .pdf	Soft copy
CCD Report	04/09/13	.doc, .pdf	Soft copy
Evaluation of IOC #1	04/09/13	.doc, .pdf	Soft copy
Draft TRR Package	04/14/13	.doc, .pdf	Soft copy
TS Set	04/21/13	.doc,. pdf	Soft copy
Evaluation of TS Set	04/28/13	.doc, .pdf	Soft copy
IOC #n	05/02/13	.doc, .pdf	Soft copy
Close Out Report	05/09/13	.doc, .pdf	Soft copy

Project Archive	05/09/13	.doc, .pdf	Soft copy
Progress Report	Every Wednesday	.xls	Soft copy
Project Plan	Every Wednesday	.mpp	Soft copy
COTIPMO	Every Wednesday		Soft copy

3 Responsibilities

3.1 Project-specific stakeholder's responsibilities

We don't have specific stakeholders for this project.

3.2 Responsibilities by Phase

Table 6: Stakeholder's Responsibilities in each phase

	Exploration	Valuation	Foundations	Rebaselined Foundations	Development-Construction Iteration	Development-Transition Iteration
Nick Wettels: Client IIV&V	**Primary Responsibility** Convey system requirements	**Primary Responsibility** Meet with developers regularly to discuss project progress and plan. **Secondary Responsibility** Make a plan on how to get the telecommunication module which is a prerequisite of the project.	**Primary Responsibility** Provide a solution to the prerequisite module. Have weekly meeting with dev team. Finish the telecommunication module. Weekly meeting	**Primary Responsibility:** Assist in COTS decision making process with regard to Exosite. Submit new website layout requirements.	**Primary Responsibilities:** Develop telecom module to communicate with Exosite. Testing system as needed in order to provide feedback. Weekly meeting.	**Primary Responsibility:** Learn how to maintain the system.
Fei Qu: Project Manager Life Cycle Planner Developer (through Foundations phase)	**Primary Responsibility** Lead the team **Secondary Responsibility** Progress Report	**Primary Responsibility** Plan the project. **Secondary Responsibility** Make the configurator prototype.	**Primary Responsibility** Make the project plan. Track the project progress. Design the architecture of the data manipulation module of sensor data service. Update LCP according to issues from previous phase. Transition and test plan for data manipulation module.	**N/A**	**N/A**	**N/A**
Jizhou Lu Operational Concept Engineer Feasibility Analyst Developer (through Foundations phase)	**Primary Responsibility** Project Plan **Secondary Responsibility** Raise concept	**Primary Responsibility** Identify operational concepts. **Secondary Responsibility** Make the configurator prototype.	**Primary Responsibility** Analyze feasibility. Update OCD according to issues from previous phase. Transition and test plan for data website improvement module.	**N/A**	**N/A**	**N/A**
Xianan Fan Prototyper Developer (through Foundations phase)	**Primary Responsibility** Design Prototype	**Primary Responsibility** Prototype the key features of the project.	**Primary Responsibility** Improve the prototype based on the client's feedback. Help the client with the	**N/A**	**N/A**	**N/A**

			prerequisite module. Update Prototype and prototype documentation according to issues from previous phase.			
Dian Peng Architect Developer (through Foundations phase)	**Primary Responsibility** Feasibility Analysis	**Primary Responsibility** Analyze feasibility. Prepare architecture design. **Secondary Responsibility** Make the sensor data parser prototype.	**Primary Responsibility** Design the architecture of the data ingest module of sensor data service. Design the architecture of the current website improvement module. Polish the prototype which listens to the sensor data. Update SSAD according to issues from previous phase. Transition and test plan for data data ingestion module.	**N/A**	**N/A**	**N/A**
Qiuyang Liu Requirements Engineer Developer (through Foundations phase)	**Primary Responsibility** Negociation requirements	**Primary Responsibility** Generate the supporting information document. **Secondary Responsibility** Make the configurator prototype.	**Primary Responsibility** Update winbook when requirements change. Design the architecture of the sensor configurator module. Update SSAD according to issues from previous phase. Update FED according to issues from previous phase. Transition and test plan for configurator module.	**N/A**	**N/A**	**N/A**
Jordan Padams IIV&V (through Foundations phase) All Roles for Development Phase	**Primary Responsibility** Coordination & background research	**Primary Responsibility** Evaluate FC package. **Secondary Responsibility** Facilitate weekly meeting with the client.	**Primary Responsibility** Review artifacts. Facilitate the meeting with the client every week. Construct Traceability Matrix Assess Quality Management Strategy	**Primary Responsibilities:** Update all documentation according to transition to NDI-intensive and loss of team members. Evaluate Exosite and similar COTS products.	**Primary Responsibilities:** Implement and test sensor customizer. Implement and test upgraded website. Test Exosite for data services. **Secondary Responsibilities:** Facilitate weekly client meetings. Reevaluate work products and completed work to provide high-level version of IIV&V.	**Primary Responsibility:** Transition the website. Develop User Guides and documentation for all modules and COTS. Train the client on how to maintain the system including the website and Exosite.
Grader IIV&V	**N/A**	**N/A**	**N/A**	**N/A**	**Primary Responsibility:** Provide feedback to team in order to act as IIV&V for documentation.	**Primary Responsibility:** Provide feedback to team in order to act as IIV&V for documentation.

3.3 Skills

Team members	Role	Skills
Fei Qu (through Foundations Phase)	Project Manager	Current skills: Java, Objective-C, C#, HTML, CSS, JavaScript Required skills: HTML, CSS, JavaScript, WordPress, PHP, Java, Spring, Hibernate, VP-UML
Jizhou Lu (through Foundations Phase)	Life Cycle Planner & Operational Concept Engineer	Current skills: C/C++, Java, HTML, JavaScript, PHP, Python, jQuery, MySQL Required skills: HTML, CSS, JavaScript, WordPress, PHP, Java, Spring, Hibernate
Xianan Fan (through Foundations Phase)	Prototyper	Current skills: C/C++, Java, HTML, JavaScript, CSS, Balsamiq Required skills: Balsamiq, HTML, CSS, JavaScript, WordPress, PHP, Java, Spring, Hibernate
Dian Peng (through Foundations Phase)	Architect, Feasibility Engineer	Current skills: C/C++, Java, Lua, Python, PHP, HTML, JavaScript, CSS, MFC, wxWidgets, Qt, JavaEE, MySQL, Redis, SQL-Server Required skills: VP-UML, C, HTML, CSS, JavaScript, WordPress, PHP, Java, Spring, Hibernate
Qiuyang Liu (through Foundations Phase)	Requirements Engineer	Current skills: C++, Java, HTML, PHP, JSP, Python, JavaEE, Photoshop, Dreamweaver, Illustrator, MySQL, SQL-Server Required skills: HTML, CSS, JavaScript, WordPress, PHP, Java, Spring, Hibernate, VP-UML
Jordan Padams	IIV&V Project Manager	Current skills: Java, HTML, CSS, JavaScript, JavaEE,

	Life Cycle Planner NDI Evaluator Prototyper Architect Feasibility Engineer Requirements Engineer Tester Trainer	jQuery, Tomcat, MySQL, Oracle Required skills: HTML, CSS, JavaScript, WordPress, PHP, Java, Spring, Hibernate, Exosite expertise, Microsoft Project, Task Scheduling, M2M technologies, communication skills, usability engineering, VP-UML

4 Approach

4.1 Monitoring and Control

- Weekly meeting with the client to review status and ensure expectations are met.
- Weekly dev meeting to review status, discuss design/implementation decisions, and plan.
- Progress Report to track progress, elicit risks and concerns and shift focus of project accordingly.
- Project Plan to provide basis for future tasks and schedule.
- Effort Report to track team effort and ensure we are staying within estimates and modify accordingly.
- Bugzilla to track issues with documentation and software to ensure quality software is being developed.
- Commitment Reviews to ensure implementation reflects requirements.

4.1.1 Closed Loop Feedback Control

4.1.1.1 Fall Semester

We have a weekly dev team meeting and discuss what we did there.
IIV&V reports problems in bugzilla and other team members fix those problems in time.
Email is heavily used to communicate between team members.
Skype, Google Talk and join.me is used in meetings.

4.1.1.2 Spring Semester

- Weekly client meetings to ensure expectations are met.
- Email and Google Talk are used, as needed, for meetings.
- IIV&V will provide feedback, which will be input into Bugzilla.

4.1.2 Reviews

4.1.2.1 Fall Semester

- We have a weekly dev team meeting to review what we did last week.
- IIV&V reviews the artifacts and reports errors in Bugzilla.
- Code review after we start programming.
- Commitment review at each milestone.

4.1.2.2 Spring Semester

- Weekly client meetings to review status, progress, and current implementation.
- IIV&V reviews work products and errors are input by team into Bugzilla.
- Code is reviewed by developer at each commit.
- Commitment review at each milestone.

4.2 Methods, Tools and Facilities

Tools	Usage	Provider
Eclipse	Used in all module development.	Open Source
WordPress	Used to develope UI.	WordPress
Tomcat	Used as local server to test code.	Apache Foundation
MySQL	Used as local database to test code.	Microsoft
Balsamiq	Used to do prototype.	Balsamiq
VP-UML	Usded to do architecture design.	Visual Paradigm
MS Project	Used to do project plan.	Microsoft
MS Word	Used to write document.	Microsoft
Bugzilla	Bug and task tracking	Open Source
Omnigraffle	Draw diagrams	Omnigroup
Winbook	Track requirements and requirements concerns.	USC
ER System	Track team effort	USC
Team Website	Maintain documentation, team progress, and meeting minutes.	USC

5 Resources

Note: For the Foundations Phase, the Architected Agile process was utilized, and the cost estimation for that potential development effort can be found in the previous version of the LCP submitted in the DCP.

The following describes the COTIPMO estimation for the 12 week Spring semester using the NDI-intensive process model. Assumes 10 weeks will be spent on development through Construction Iteration.

Estimated CSCI577b Effort : 1 team members at 12 hrs/week for 10 weeks

Total estimated effort: 1.67PM

Budget information: $2500

Project duration: 12 weeks

Component modules in your development project: Sensor Data Service (Data Ingest Module, Data Manipulation Module), Sensor Configurator, Website Development

Programming language used: PHP, Java, HTML, Javascript

NDI Used: Exosite Portals, WordPress

Table 7: Application Count: Screens

Screen	Number of views	Number of source of data tables	Complexity level	Rationale
Exosite				
Home Screen	4	5-8	Medium	Dashboard screen with pop-ups views to manage widgets, add widgets, and configure dashboard itself. Data tables could vary because it is dependent on the number of widgets open. Value given is an approximation of the number of widgets a user will use.
Data Screen	2	1-3	Simple	Screen has accompanying pop-up to add new data source. Data tables used to list devices, accompanying data sources, and data status information.
Device Screen	3	2	Simple	Device management screen has accompanying pop-up to update a device and another to add a new one. Main screen contains table with basic device status

				information.
Events Screen	3	2	Simple	Event management screen has 2 pop-up screen to manage events and alerts, respectively. Page has 2 tables populated with event/alert details.
Dashboards Screen	4	2	Simple	Dashboards management screen is administrative screen with 2 pop-ups to create and update dashboards, respectively. Screen also contains 2 tables that list current user's dashboard and any managed dashboards (customers).
Admin Screen	2	2	Simple	Manage user screen allows you to add users that are already in the system (db) or create a new one. Also provides ability to check resource limits.
Wordpress				
Home Page	1	1	Simple	Content based web page with some potential configuration changes to the template
Energy Harvesting Page	1	1	Simple	Basic content
Sensor Solutions Page	1	1	Simple	Basic content
News Page	1	1	Simple	Basic content
About Us Page	1	1	Simple	Basic content
Data Services Page	1	1	Simple	Basic content with link to Exosite services

Table 8: Application Count: Reports

Report	Number of sections	Number of source of data tables	Complexity level	Rationale
Exosite				
Export Data	1	1-3	Simple	CSV export report that includes columns of data. Could include multiple data points from one data source. Data tables range is an approximation of the number of data points a user would include.

Table 9: Application Count: 3GL components

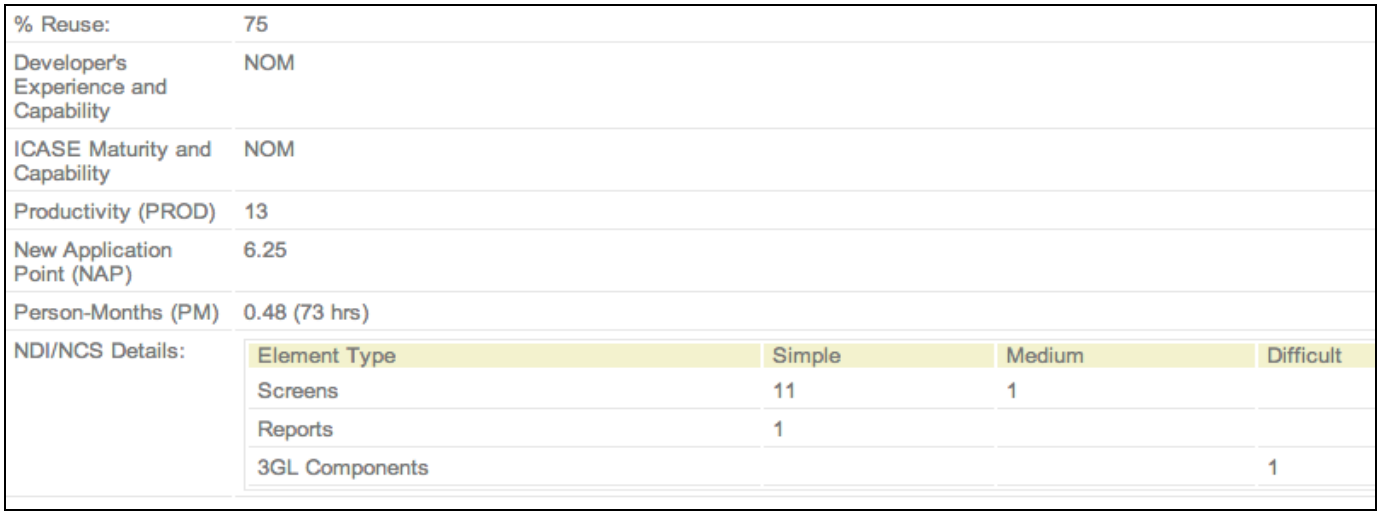
Component	Rationale

WordPress	
Sensor Customizer	This component will involve some Jquery and potentially PHP to develop. May become a simple screen if a plugin can be found to accomplish functionality.

Table 10: Application Point Parameters

Parameter	Value	Rationale
Developer's Experience and Capability	Nominal	Some experience in web development, but not enough to warrant higher experience level.
ICASE Maturity and Capability	Nominal	Leverage basic life cycle and project management tools.

Figure 1: COTIPMO - NDI Result



% Reuse:	75			
Developer's Experience and Capability	NOM			
ICASE Maturity and Capability	NOM			
Productivity (PROD)	13			
New Application Point (NAP)	6.25			
Person-Months (PM)	0.48 (73 hrs)			
NDI/NCS Details:	Element Type	Simple	Medium	Difficult
	Screens	11	1	
	Reports	1		
	3GL Components			1

Given one developer working 12 hours per week for 10 weeks (length of Construction Iteration), the team has an effort of 1.67 PM to devote to this project. Using COTIPMO, we were able to estimate the cost of the project to be 0.48 PM (73 hrs) which is well within our PM range. This was calculate by attempting to convert the relative difficulty of development using the NDI tools into functions points that can be used to give a base estimate. Additional functionality may potentially be added if more the effort is available.

6 Iteration Plan

6.1 Development Phase - Construction Iteration

6.1.1 Plan

This plan describes the details of Construction Iteration of the Development Phase for Somatis Web and Data Services including the Alpha Delivery, Beta Delivery, Core Capability Drivethrough, and Operations Delivery milestones. Each milestones is attributed to one sub-iteration of the Construction Iteration. Due to the small team size and accompanying high risk and schedule volatility, the each sub-iteration will not be included in this plan. A more detailed view of the sub-iterations can be seen in the weekly updated schedule. This plan includes the capabilities to be implemented in this iteration, and those that will/will not will be tested.

6.1.1.1 Capabilities to be implemented

Table 11: Iteration Capabilities to be implemented

ID	Capability	Description	Priority	Sub-Iteration
IC-1	Login to website	Admin user can login to WordPress.	High	1
IC-2	Create new website user	Admin can create new user to access website admin interface.	High	1
IC-3	Update website content functionality	Admin user can update website content through the WordPress admin interface.	High	1
IC-4	Update website layout	Layout reflects the client's requirements and expectations.	Very High	1
IC-5	Update website content	Content reflects the client's requirements and expectations.	Very High	1
IC-6	Customize sensor through expert path	User can access sensor configurator interface and complete the expert path with client expected data.	Very High	1
IC-7	Sensor configurator checkout sends email to	When a user completes the configurator workflow, the checkout procedure concludes with an email to the Somatis	Very High	1

	sales department	sale department.		
IC-8	Login to Exosite	Admin user can login to Exosite.	Med	2
IC-9	Add new Exosite user	Admin user can add new user to Exosite. Wait until iteration 3 because it will require a up front cost to create new user.	Med	3
IC-10	Add new device	Admin user can add new device to Exosite.	Med	3
IC-11	Add new alert	User can create event-based data alert.	Med	2
IC-12	Add new subscription	Admin user can add daily subscription alerts to account.	Med	2
IC-13	View data points	User can view their data in a list format.	Med	2
IC-14	View data as graph	User can create widget and visualize data in a graphical format	Med	2
IC-15	Export data	User can export data as a CSV	Med	2
IC-16	Receive data	Sensor can authenticate and send data to Exosite data service.	Med	3

6.1.1.2 Capabilities to be tested

Table 12: Iteration capabilities to be tested

ID	Capability	Description	Priority	Iteration
IC-1	Login to website	Admin user can login to WordPress.	High	1
IC-2	Create new website user	Admin can create new user to access website admin interface.	High	1
IC-3	Update website content functionality	Admin user can update website content through the WordPress admin interface.	High	1
IC-4	Update website layout	Layout reflects the client's requirements and expectations.	Very High	1
IC-5	Update website content	Content reflects the client's requirements and expectations.	Very High	1

IC-6	Customize sensor through expert path	User can access sensor configurator interface and complete the expert path with client expected data.	Very High	1
IC-7	Sensor configurator checkout sends email to sales department	When a user completes the configurator workflow, the checkout procedure concludes with an email to the Somatis sale department.	Very High	1
IC-8	Login to Exosite	Admin user can login to Exosite.	Med	2
IC-9	Add new Exosite user	Admin user can add new user to Exosite. Wait until iteration 3 because it will require a up front cost to create new user.	Med	3
IC-10	Add new device	Admin user can add new device to Exosite.	Med	3
IC-11	Add new alert	User can create event-based data alert.	Med	2
IC-12	Add new subscription	Admin user can add daily subscription alerts to account.	Med	2
IC-13	View data points	User can view their data in a list format.	Med	2
IC-14	View data as graph	User can create widget and visualize data in a graphical format	Med	2
IC-15	Export data	User can export data as a CSV	Med	2
IC-16	Receive data	Sensor can authenticate and send data to Exosite data service.	Med	3
IC-17	Browser support	Verify website and Exosite function properly in necessary browsers.	Low	4
IC-18	Multiple user access	Verify multiple users can access website and Exosite at same time	Low	4
IC-19	Simultaneous data storage	Verify Exosite can receive data from devices simultaneously.	Low	4

6.1.1.3 Capabilities not to be tested

The current iteration plan calls for all capabilities noted to be tested. This plan will be updated accordingly if untested capabilities arise.

6.1.1.4 CCD Preparation Plan

This section describes the plans for the CCD include meeting information and the materials to-be-completed:

Table 13: CCD Preparation

Users to be involved	Nick Wettels
Meeting Time/Place	4/5/13 – 9am – Somatis HQ
Introductory Materials	Presentation Slides
Method of CCD	User Manual Walk-through
User Manuals	Website Maintenance Data Services

6.1.2 Iteration Assessment

6.1.2.1 Capabilities Implemented, Tested, and Results

The following table includes all of the capabilities tested from the first iteration.

ID	Test Results	If fail, why?
IC-1	Pass	
IC-2	Pass	
IC-3	Pass	
IC-4	Pass	
IC-5	Pass	
IC-6	Pass	
IC-8	Pass	
IC-10	Pass	
IC-11	Pass	
IC-12	Pass	
IC-13	Pass	
IC-14	Pass	
IC-15	Pass	
IC-17	Fail	Interface errors when using Chrome. Sent error report to Exosite Support team.

Table 14: Capabilities Implemented, Tested, and Results

6.1.2.2 Core Capabilities Drive-Through Results

For the CCD, the client walked through all capabilities implemented this iteration. The following table lists the capabilities he explicitly commented on, as well as an overall comment he noted at completion:

ID/Capability	Positive/Negative	Description	New Risk?
IC-5	Positive	User manual was very easy to follow to update content	N
IC-4	Positive	Look-and-feel looks great. Wants website to go operational today.	N
Content update	-	Client requested update to website content prior to operations: change "Robotic Skin" to "Robotic Sensors", hide "Sensor Customizer" since it is lacking content	N
IC-6	Negative	Customizer is lacking content. Hide page until content is provided.	N
IC-3	Negative	Include how to hide a page in the User Manual.	N
Administrative functions	Negative	Need sections added to User Manual for managing the Hosting Service administration, including access to the File Manager, Wordpress files, and database.	N
IC-10, 11, 12, 13, 14, 15, 16	Positive	Exosite provides easy step-by-step process for each of these capabilities.	N
Overall	*Positive*	*Client is very pleased with progress of system and user manuals. Most functionality was walked through and system meets all quality and content requirements other than those noted in the this table.*	*N*

Table 15: CCD Feedback

6.1.3 Adherence to Plan

Iteration 1 (which included Alpha and Beta releases) went according to plan, with most functionality implemented. The capabilities not implemented were IC-7, 9, 16, 18, and 19 and will be pushed to the final iteration. After discussion with the client, it is possible that IC-7 will be eliminated from the list due to the lack of content that will be available for the customizer heading into the last iteration, as well as a change in the company business model that may remove this functionality altogether. IC-9 will also be removed from capabilities to-be-implemented because there are no active devices to use the data services, so paying for more user accounts (required by Exosite) is not feasible at this time.