

**STUDENT FINANCIAL ASSISTANCE (SFA)
CONFIGURATION MANAGEMENT (CM)
PROJECT DEPLOYMENT REPORT**



Overview

Task Order 47.1.3 stated that the Enterprise CM framework would be established and that CM project processes would be rolled out to 2 in-scope projects. ModPartner nominated three to four candidates and the SAPG chose two pilots for deployment (the Enterprise Architecture Integration [EAI] and the eCampus Based Services [CBS]). Both of these pilots are part of the Student Financial Assistance (SFA) Modernization program which uses ModPartner as the prime contractor.

Audits were conducted on both projects using the Configuration Management Audit Checklist. The associated work product documents, *Configuration Management Audit of the e-Campus Based Services Project* and *Configuration Management Audit of Enterprise Architecture Integration Project* can be found listed in the index of deliverables and work products and are included.

Organizational Goals

The goal of Task Order 47.1.3 is to provide tools and assistance to SFA in its quest to attain SA-CMM level 2. SA-CMM level 2 implies SA level 2 for SFA and SW-CMM for its projects. Although the Enterprise CM framework is a Software (SW-CMM) level 2 topic, the change process is always present and implied as a subset of the various SA-CMM KPA. ModPartner also has an internal goal (Policy #1162) of attaining SW-CMM level 3 for its projects in the Federal Sector. ModPartner has an internal organization (QPI) that evaluates through audit the progress of its projects in attaining SW-CMM Level 3 activities. The ModPartner personnel assigned to Task Order 47 also use the Configuration Management (CM) Audit Checklist to evaluate the progress of pilots in attaining SW-CMM level 2 compliance.

Configuration Management Plans (CMP)

The two pilots were deployed early in the Configuration Management (CM) Key Process Area (KPA) phase (Task Order 47.1.3). Both pilots created a Configuration Management Plan (CMP). Both plans were audited by the SAPG CM SubGroup. Both plans were evaluated in terms of conformance with both the Carnegie Mellon Software Engineering Institute (SEI) Software Capability Maturity Model (SW-CMM) as well as the ModPartner QPI standards. The plans were developed during the CM KPA period, and covered most of the important Software Configuration Management (SCM) KPA points. The plans also specified procedures for most aspects of SCM, but some of these procedures could not be conducted because the project had not reached that stage in its work delivery. Weaknesses displayed initially in the pilot projects were lack of clear identification of the individuals responsible, lack of training of members in the execution of the plan, and coverage of all the areas that require change control. All of these items had improved when a second evaluation took place. The pilot projects tested out very well on their second review. The checklists used by Task Order 47 personnel are attached. In addition to the CM SubGroup audit, the ModPartner QPI conducted an audit of the CBS project and arrived at similar conclusions as the CM SubGroup.

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Configuration Management Software Support Tools

A key distinction between CMM level 2 and level 3 is that a level 2 organization has certain definable processes while a level 3 organization has moved beyond mere existence of a process into standardizing on processes that work well for that organization. As a level 2 organization (the SFA Goal), it is important that change control and other processes occur within its projects. It is not important, as a level 2 organization, that a particular manufacturer be chosen as a standard to support a particular process. As a level 3 organization (the ModPartner Goal), it is important to choose common standards for processes when this is allowed by its clients. SFA is experimenting with the use of the Rational Software products to support Configuration Management. Both pilot projects used the Rational Software tool set as part of the SFA experimentation. Rational Software, as is likely with competing commercial products, does have some unique challenges if adopted throughout SFA. The two pilot projects pioneered the SFA learning of the product and developed some otherwise unavailable documentation on how to use the product suite. Equally well the pilot projects developed some good work arounds and illuminated some financial and commercial practice considerations.

Two other documents are provided on how to use the Rational Informational Tools, ClearCase and ClearQuest. These documents, *Configuration Management Standards Using Rational ClearCase*, and *Configuration Management Standards Using Rational ClearQuest*, are included and are listed on the index of deliverables and work products.