An Overview of the Enterprise Unified Process (EUP)

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The Unified Process has become a de facto standard development process within the object-oriented and component-based software communities. Although the Unified Process is a good start the reality is that enterprises need something more, they need a software process that reflects the full lifecycle of software-based systems. In this document we introduce you to the Enterprise Unified Process (EUP). People familiar with the Rational Unified Process (RUP) can see that the extensions include two additional phases, Production and Retirement, as well as new disciplines: Operations & Support as well as several enterprise disciplines.

What is the EUP?
The Enterprise Unified Process (EUP) is an extension to the Rational Unified Process (RUP). A common strategy for adopting the EUP is to first adopt the RUP, tailoring it to your environment, and then tailor the EUP extensions on top of the RUP. The RUP product from Rational Corporation is a significant resource and provides an excellent basis from which to start. Figure 1 depicts an augmented view of the EUP lifecycle, one that includes the phase milestones along the bottom of the diagrams and how a team will cycle back to earlier in the lifecycle when they start working on a new release.

Figure 1: Augmented Lifecycle for the EUP v2004.
The EUP defines extends the RUP to make it a full-fledged IT lifecycle. First, it adds the Operations & Support discipline as well as the Production and Retirement phases to reflect the true software process lifecycle. It then goes further to include cross-system issues with the core enterprise disciplines to cover the full Information Technology (IT) lifecycle.

**Operations and Support Discipline**

The purpose of the Operations & Support discipline is exactly as the name implies, to operate and support your software. Operations and support are both complex endeavors, endeavors that need processes defined for them. This discipline spans several phases, as do all the others. During the Construction phase, and perhaps as early as the Elaboration phase, you will need to develop operations and support plans, documents, and training manuals. During the Transition phase you will continue to develop these artifacts, reworking them based on the results of testing and you will train your operations and support staff to effectively work with your software.

**Production Phase**

The EUP adds a fifth phase to the Unified Process, Production, representing the portion of the software lifecycle after a system has been deployed. As the name of the phase implies, its purpose is to keep your software in production until it is either replaced with a new version, from a minor release such as a bug fix to a major new release, or it is retired and removed from production.

**Retirement Phase**

The sixth phase of the EUP is Retirement, representing the part of the system lifecycle where a system is permanently removed from production. Retirement is often referred to as dispensation or disposal. Retirement activities typically focus on transformation and archival of data, configuration management of software components, and significant system integration testing to ensure that the retirement of your system does not have adverse effects on other systems that assume it still exists. Legacy systems are often retired once they have been replaced by new systems, a perfect example is the replacement of your existing human resources systems with a commercial off-the-shelf (COTS) package.

**The Core Enterprise Disciplines**

The enterprise disciplines – Enterprise Administration, Enterprise Architecture, Enterprise Business Modeling, People Management, Portfolio Management, Software Process Improvement (SPI), and Strategic Reuse – focus on the cross-project issues which most organizations struggle with on a daily basis. These disciplines encapsulate the activities required to extend the Unified Process to become a true IT lifecycle instead of just a development process. It’s interesting to note that Figure 1 indicates that significant work occurs before the Inception phase of a project. These disciplines used to be captured by a single Enterprise Management discipline in earlier versions of the EUP.