**R12 – Codelines, Codelevels and Types of Patches**

Types of Application Patches:
There are several different types of Oracle Applications patches. These are some of the common patches:

**One-off patch:** This is the simplest type of patch. It is created to resolve a specific bug.

**Minipack patch:** This is a collection of one-off patches and enhancements related to a particular module. Alphabetic characters denote the Minipack version for the module; for example, the product code for the Application DBA utilities is AD, and version Minipack I of this product would be called AD.I.

**Family Pack patch:** This is a collection of Minipack patches for a particular family group of application modules. Alphabetic characters denote the Family Pack version; for example, the J version of the Human Resources Suite Product Family would be HR_PF.J.

**Maintenance Pack patch:** This is a collection of Family Packs that serves as a point-level release upgrade; Oracle Applications Release 11.5.10 is an example of a Maintenance Pack.

There are also other types of patches:

**Consolidated patch:** This is a collection of one-off fixes for a Family Pack or Maintenance Pack; Oracle Applications 11.5.10 Consolidated Update 2 (CU2) is an example of a consolidated patch.

**Interoperability patch:** This is a patch that is required for Oracle Applications to function with a newer version of a technology stack component; for example, you would apply an interoperability patch when upgrading the database to version 10g.

**NLS patch:** This is a patch that updates language-specific information for multi-language installations.
Rollup patch: This is a collection of one-off patches that update code levels for particular products.

Legislative patch: This is a special patch for HR Payroll customers; it contains legislative data for multiple countries. As the patch group size increases from one-off patches to Maintenance Packs, the complexity of the patch application process also increases. More research is required for Family Packs than is required for a Minipack. Due to the increased complexity, there is more planning required for Maintenance Packs and Family Packs than other patches.

Codelines(12.0:A, 12.1:B): In release 12, Oracle Applications introduces codelines and codelevels to ease tracking of patch prerequisites, dependencies, and compatibilities. Patches are associated with a codeline, which not only identifies the set of product features, but also the order of the various patches released to provide fixes to that set of features. A codeline begins with a base point that consists of a unique set of product features, and progresses to include all the patches created to provide fixes to that base point. For example, Oracle Financials and Oracle Human Resources are active in your system. The initial set of features or base point of Oracle Financials and Oracle Human Resources are FIN.A and HR.A, respectively. When fixes are required for the base point, a patch (or a set of patches) is released, and the order in which the patch created is indicated by a number appended to the base point. Each new patch is called a codelevel. For example, codelevel FIN.A.1 is the first set of fixes to base point, FIN.A, and FIN.A.2 is the second set of fixes, and so on.

Codelevels(R12.AD.A.1, R12.AD.A.2): Codelevels are cumulative — each one contains the initial set of features plus all the fixes created to date (except those replaced by subsequent patches) for that product family.
Some patches may contain new features. These patches create new base points or start new codelines. For example, when Oracle Financials releases new features in a patch (instead of being part of a complete upgrade of Oracle Applications), the patch starts a new codeline, FIN.B. Then, the subsequent release of patches (or codelevels) with fixes to the expanded set of features are named accordingly: FIN.B.1, FIN.B.2, FIN.B.3, and so on. As a user, you can choose to accept a patch to fix your existing codeline or you can accept a patch on a more recent codeline, which will not only provide fixes to your products, but will also add feature enhancements to your system.

**What is a pre-requisite patch ?**

A prerequisite patch fulfills a dependency for another patch. In Release 12, only codelevels can be prereq patches. Strictly speaking, they are co-requisites and can be applied in any order before using the system. We recommend that you merge a patch with its required prerequisites, with the exception of prerequisite patches for the AD product. Oracle Patch Application Assistant (PAA) helps us track and perform manual steps during patching.

### How do I determine the baseline ?

Following select will tell you the R12 version:
SQL> select 'RELEASE ' || RELEASE_NAME from APPLSYS.FND_PRODUCT_GROUPS;

Following select will tell you the products and their corresponding baselines:
SQL> set pages 999
SQL> set long 9999
SQL> column BASELINE format a8
SQL> break on baseline
SQL> select BASELINE, upper(abbreviation), name from AD_TRACKABLE_ENTITIES order by baseline, abbreviation;