

**Drake University
Computer Information Systems
Application Software Release Application
Policies and Procedures**

This document describes how software releases and patches will be applied to the application environments. A separate procedure will apply to Major Releases (e.g. 6.0), Point Releases (e.g. 5.4) and patches to any Release that are not applied with the Release. All three procedures are contained within this document.

Applications Covered Under this procedure are:

DUSIS which includes: SCT Banner including Self Service, Bookshelf and Online Help, SCT Banner Xtender Solutions, SCT Workflow, Eprint

Luminis which includes: SCT Luminis Content Management System, SCT Luminis Platform System

AdAstra Room Scheduling

Blackboard

RDBMS and Applications servers such as Oracle, Oracle Application Server, MicroSoft SQLServer.

Major Releases

Major Releases (example 6.0) must be older than 90 days before they will be selected for application. All available patches will be applied with the Major Release, patches do not have to be 90 days old. This will ensure that major bugs have been identified and supplied patches by the vendor and those patches are applied to the Drake environment.

The DBA or System Administrator will be notified of major release availability via the BPOST listserv or other Vendor announcement such as an email. The DBA will communicate the availability of the release and will immediately send out release documentation to Data Custodians, Programmers and OIT personnel. The release application schedule will be set by the DUSIS Team Leaders committee as appropriate and communicated by the Director of Computer Information Systems. DUSIS Team Leaders will determine the go live date and work backwards from that date. The go live date must accommodate the 90 day wait period and the Release Schedule.

During the 90-day wait period it is expected that Data Custodians will begin plans for testing the release. They should review all release documentation in detail and build test plans based on critical business processes and changes to the release. They will also need to test Drake modifications to application software code as well as Drake enhancements to the application software. They will also be expected to begin plans for training end users on the release function.

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The Release Schedule

During Week 1, Data Custodian and OIT personnel will begin to finalize testing and training plans. Simultaneously, the DBA will build the Test Release environment by cloning the Production Environment and the PROD Database instance and applying the release over it. Patches that will be applied are patches that are available when the release is downloaded which should be the first day of week one.

Week 1

1	2	3	4	5 Weekend
Release Environment Built				

Week 2

1	2	3	4	5 Weekend
Release Environment Built				

Week 3

1	2	3	4	5 Weekend
Release Environment Built				

After the Test Release Environment has been built, during weeks 4-6, the Programmers will resynchronize any modified objects in the Test Release Environment to ensure that any Drake University modifications to the application are carried forward into the new release.

Week 4

1	2	3	4	5 Weekend
Code Resynch				

Week 5

1	2	3	4	5 Weekend
Code Resynch				

Week 6

1	2	3	4	5 Weekend
Code Resynch				

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By the first working day of week 5, all plans for testing and training should be finalized. Release testing will begin by the Data Custodians/Team Leaders and Operations simultaneously. They should test to ensure that the major functions of the release are working properly and test to ensure that any Drake enhancements or modifications to the application software are working properly. Each Data Custodian/Team Leader will be responsible for producing a test plan in a standard format. The test plans will be reviewed formally with the Director of CIS, all Data Custodians/Team Leaders, Operations/DBA Team and Programmer/Analysts on the Friday before testing is to begin. The Director of CIS will schedule the meeting.

The Data Custodians and Operations will then be asked to sign off that the release is ready for move to production. Sign off will occur during a formal test review meeting which will be scheduled by the Director of CIS.

Week 7

1	2	3	4	5 Weekend
Release Testing				

Week 8

1	2	3	4	5 Weekend
Release Testing				

Week 9

1	2	3	4	5 Weekend
Release Testing				

Week 10

1	2	3	4	5 Weekend
Release Testing				

Week 11

1	2	3	4	5 Weekend
Release Testing				

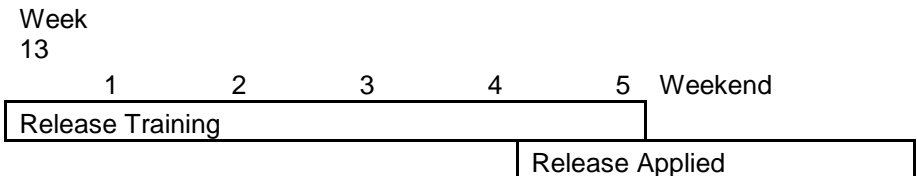
Week 12

1	2	3	4	5 Weekend
Release Testing				

During Week 11 release training will occur so that users of the application software are prepared to operate the new functions of the release on the next working Monday. Over the weekend, the release is applied to the Production Environment. Any synchronized

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code is promoted to the Production Environment from the Test Release Environment. The Test Environment is recreated from the Production Environment.



On the first day of the twelfth week, the release will be in the Production and Test Environments as well as failover environments.



Point Releases

Only vendor point releases (example 5.6) that are older than 6 weeks (42 days) will be selected for application. All available patches will be applied with the Point Release, patches do not have to be 6 weeks old. This will ensure that major bugs have been supplied patches by the vendor and those patches are applied to the Drake environments. The exception to this rule will be any release containing regulatory required function. These releases will follow a schedule as determined by the functional business unit. A Point Release will not be applied in the same month as a Major Release.

Point Releases will be applied on a set schedule. The schedule for Point Releases begins when the Point Release has been identified by the DBA or System Administrator as available from the vendor. This occurs when the DBA sees that the release is available via the BPOST listserv or other vendor communication such as email. The DBA will communicate the availability of the release and will immediately send out release documentation, which includes release guides and changed object lists, and a schedule for implementation of the release to Data Custodians, Programmers and OIT help desk personnel. The DBA will not wait until the release is 6 weeks (42 days) old before communication begins!

The Point Release schedule will be determined by adding 42 days to the release availability date. The DBA will then add 42 days to that date. The next available maintenance date will be the date the release is set to go to production. When building the release schedule the DBA should work backwards from the maintenance date to build the 6 week release application schedule which is detailed below.

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During the 6-week (42 day) wait period it is expected that Data Custodians will begin plans for testing the release. They should review all release documentation in detail and build test plans based on critical business processes and changes to the release. They will also need to test Drake modifications to the vendor code as well as Drake enhancements to the application software. They will also be expected to begin plans for training end users on the release function.

Weeks 1 and 2 of the Release Application Schedule

The DBA will redistribute release documentation so that the current documentation reflects any changes that have come about during the waiting period. The DBA will download the release and patches and build the Test Release environment by cloning the Production Environment to the TREL Database instance and applying the release over it. Patches that will be applied are patches that are available when the release is downloaded which should be the first day of week one.

Week 1

1	2	3	4	5 Weekend
Release Environment Built				

Week 2

1	2	3	4	5 Weekend
Release Environment Built				

After the Test Release Environment has been built, the Programmers will resynchronize any modified objects in the Test Release Environment to ensure that any Drake University modifications to application software are carried forward into the new release.

Week 3

8	9	10	11	12 Weekend
Code Resync				

Week 4

8
Code Resync

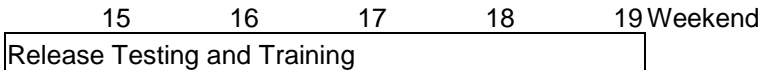
Weeks 5 and 6 are reserved for Release testing and training. Data Custodians should test to ensure that the major functions of the release are working properly and test to ensure that any Drake Enhancements or Modifications to the application are working properly. Each Data Custodian/Team Leader will be responsible for producing a test plan in a

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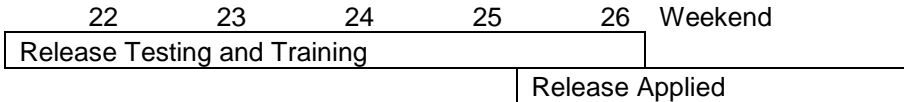
standard format. The test plans will be reviewed formally with the Director of CIS, all Data Custodians/Team Leaders, Operations/DBA Team and Programmer/Analysts on the Friday before testing is to begin. The CIS Administrator will schedule the meeting. The Data Custodians and Operations will then be asked to sign off that the release is ready for move to production. Sign off will occur during a formal test review meeting which will be scheduled by the Director of CIS.

Prior to the move to Production release training will occur so that users of the application are prepared to operate the new functions of the release on the next working Monday. The last day of week 6 will coincide with the regularly scheduled maintenance date and the release will be applied in production on that date. Any synchronized code is promoted to the Production Environment from the Test Release Environment according to change management procedures. The Release is also applied to the Test Environment.

Week 5

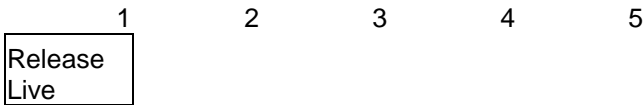


Week 6



On the first working day after the release has been applied in the Production and Test Environments.

Week 7



Patches

Patches that need to be applied outside of normal release application, will be applied via [Application Software Production Change Management Policies and Procedures](#).

Security Patches

All security related patches will be tested and applied within 30 days of issuance. This is required for PCI DSS compliance.

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Release Rollback Policy

Because Drake requires extensive testing and signoff from users before putting a release into production, it is Drake's policy not to rollback to a previous release level once a release is in production.

Release Policy Specific to Data Custodians

Release Available from Vendor

A release will be announced as available from the vendor. The DBA will obtain the Release Notes and distribute them to the Business Units. The release notes will be distributed to the Data Custodians as identified in the Data Standards document. The DBA should distribute the release notes immediately upon receipt. The waiting period before the Release Application Procedure can begin starts on the date that the vendor announces the availability of the release.

Along with the Release Notes, the DBA will distribute a schedule for application of the Release that complies with Release Application Policy and Procedure. This schedule will tell all involved in the Release Application Procedure exactly what activities will be occurring when. This Release Application schedule will be distributed in the form of a Microsoft Excel worksheet.

The Waiting Period

The waiting period is designed so that Drake does not apply a release that has the potential of being full of defects. It is expected that other schools will apply the release and find the defects for the vendor to fix. By the time that Drake applies the release, patches will be available for all of the major defects within the release. These patches will be applied with the release.

During the waiting period, the Data Custodians will have the release notes, and should be reviewing these release notes and planning activities according to the functional changes within the release. Data Custodians will need to review release notes for their specific software module as well as any general modules to determine the full scope of functional changes. The activities planned should be testing and training.

Planning and Performing a Release Test

The purpose of release testing is to ensure that there are no surprises in store for a business unit when the release is applied to the Production Environment. Business Units who are operating in the Production Environment are required to perform release testing. Release Testing should be performed on the application software module specific to that Business Unit as well as the General module if there are impacts to the Business Unit.

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Data Custodians are accountable for performing the release test. Recommended tasks for release testing are:

1. Review the release notes for new and changed business processes and/or function that will be required or desired for use by Drake.
2. Identify business processes that are changed in this release that may have been customized by Drake.
3. Keep a list of critical business processes that should always be tested when a new release is being applied.
4. Document the business processes in 1, 2 and 3 above in a formal test plan (required) and determine how they should to work within the new release.
5. Set up the validation and rule tables within the test release environment. This cannot be performed until the Release has been applied to the Test Release environment and code resynchronization is complete.
6. Perform iterations of each business process to determine that each works as expected.

Planning Release Training

The purpose of release training is to ensure that users of an application software module are familiar with the new business function supplied in the release prior to those users being required to perform those functions in the Production Environment. There are no specified requirements for completing release training. Business units that are operating in the production environment and have functional changes in a release must perform release training. Recommended tasks for release training are:

1. Review the release notes for new and changed business processes that will be required or desired for use by Drake.
2. Identify business processes that are changed in this release that may have been customized by Drake.
3. Identify the Drake Personnel who will be responsible for performing those business processes.
4. Identify the magnitude of the changes. Based on the magnitude of changes, identify the method for which training will be delivered. For small changes, training may be delivered via an email communication and/or attached training document. For large changes, you may want to schedule more formal training in person.
5. After release testing is complete, deliver training to your users. Announce to them the effective date of these changes and what will be expected of them.