## REVISION CONTROL

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<td>03/12/10</td>
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<td>Release of draft document</td>
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<tr>
<td>05/26/10</td>
<td>J Lussier</td>
<td>Edit/clarify procedures; add Data Warehouse and Portal</td>
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<tr>
<td>06/07/10</td>
<td>CFS Prod Support Planning Team</td>
<td>Modified process flow chart to include Performance; edit resolution processes; other minor edits</td>
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<td>06/08/10</td>
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## Review/Approval History

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About This Document

This CFS Incident Management Procedures document provides users with a high-level understanding of how production support will be structured for CFS. Intended as an overview, it explains how users will obtain production support for any CFS-related product, including but not limited to the CFS Application, the CFS Data Warehouse (OBIEE, ETL) and the CFS Portal.

The document is provided as a supplement to the existing IT Service Center Incident Management Procedures. It does not attempt to repeat the details found in that document (i.e. service level agreements) or to provide comprehensive lists of CTIs for opening tickets. Instead, it explains the approach used to include campus-based production support staff in the incident management process, in ways not possible in pre-CFS environments.

Throughout this document, references will be made to additional process guides or supporting materials. Individuals not familiar with the related processes are encouraged to review the documents below.

Related Documents and Processes

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<tr>
<th>Document</th>
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<tr>
<td>IT Support Center Incident Management Procedures</td>
<td>IT Service Center</td>
<td>Details IT Support Center Service Level Agreements, including definitions for severity codes, response times, etc.</td>
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1.0 The CFS Production Support Model

The CFS Production Support model is built on the current practices for Incident Management, as documented in the ITService Center Incident Management Procedures. Changes that have been implemented to support CFS have been done so to leverage new opportunities presented in the CFS environment.

The primary change is that CFS assignment groups will now be made up of both Chancellor’s Office and campus-based staff resources. This change has been implemented to incorporate campus-based production support staff into the incident management process to allocate additional resources and expertise to troubleshoot and resolve incidents.

The CFS Production Support model uses the creation of a new role – the CFS Production Support Group - as the group authorized to use production support instances, provision Oracle support accounts, and grant temporarily escalated application authorizations. This role is an actual security group role that campus and CMS Central staff will be assigned to. Additional detail about this role will be provided in subsequent sections of this document.

Assumptions

The following assumptions and definitions will apply to this document:

- The procedures in this document apply only to non-performance incidents. Performance incidents will be managed via the Application Performance Management Process.
- All procedures, policies, escalations, incident severities, priorities and response times outlined in the ITService Center Incident Management Procedures will be followed.
- All incidents requiring the allocation of additional resources to troubleshoot and resolve will require an incident ticket. That ticket will be created in the system-wide incident management system. This system is currently the Chancellor’s Office Remedy System.
- Staff resources that will support the CFS Incident Management Procedures will be assigned to a CFS Production Support role.

2.0 The CFS Production Support Group / Role

The CFS Production Support Group is made up of campus and CMS Central subject matter experts in the CFS Application, CFS Data Warehouse and CFS Portal. Members of this support group will be placed in a Remedy group called CFS Production Support.

Members of the CFS Production Support Group will:

- Serve as the first point of contact at each campus to determine if the issue can be resolved locally
- Open tickets / determine the appropriate Resolution Process to follow
- Provision and de-provision additional production support members to work specific tickets and/or provide additional support.
- Track issues through the ITSupport Center issue resolution software (currently Remedy).
- Participate, as applicable, in resolving tickets based on Remedy Category, Type and Item (CTI) assignment groups.

Not all members of the CFS Production Support group will perform all of the tasks outlined above, but through membership in the CFS Production Support Remedy group, will have the ability to do so.
Forming the CFS Production Support Group

Many of the individuals comprising the CFS Production Support Group are those who were already providing production support both at CMS Central and/or at the campuses. CMS Central will work with each campus to identify 2-3 primary production support members at their campus and add these individuals as a member of the CFS Production Support group.

During the initial build-out, campuses can also open a service request to add a campus member to the CFS Production Support group. Requests should be submitted to the IT Support Center with a CTI of CMS | CFS | Production Support Remedy group.

3.0 The CFS Incident Management Process Flow

The following chart provides an overview of the CFS Incident Management Process and outlines the relationship between the CFS Production Support Group and the overall process flow.

Shaded Areas

The gray-shaded areas in the flow chart refer to three components of working issues, as follows:

- **Top Left**: When an issue is identified at a campus, the campus first tries to see if a local resolution is possible. Typically, the person on the campus who is managing local issues resolution will be a member of the CFS Production Support group. If a resolution is found locally, nothing further is done. If a resolution is
not found locally, a CFS Incident Ticket is opened, at which point the issue is formally assigned to the CFS Production Support group in Remedy.

- **Bottom Left:** The steps represented in this area apply only to the CFS Application and not apply to issues reported with the CFS Data Warehouse or CFS Portal. Activities unique to CFS Application troubleshooting include:
  - Requesting a Database Account
  - Requesting a Database Clone

  The procedure to follow to request a database account or clone is detailed in later sections.

- **Bottom Right:** Issues reported for the CFS Application, CFS Data Warehouse and/or CFS Portal are analyzed to determine what process they need to follow to achieve resolution. CMS refers to these “groupings” as Resolution Processes.

### Resolution Processes

- **Functional Error / Informational**
  These reported issues can be an issue requiring additional knowledge of the software, training, user error, or just questions about how the application / report / portal is supposed to function. Users are provided with the information needed to resolve the ticket.

- **Application Code Fix or Enhancement**
  If an incident will require a fix or enhancement, the development and delivery of the fix / enhancement will follow the CFS Release Management process.

- **Performance**
  Incidents related to performance will follow the documented procedures in the CMS Performance Guide.

- **CFS Application Configuration Change Request**
  This category includes any configuration requests made for the CFS application which includes application security and job scheduling. All incident resolutions will follow the CFS Configuration Change Request process. See the CFS Application Configuration / Support / Change Procedures document for additional information.

- **CFS Security Change Request**
  The CFS Application Configuration / Support / Change Procedures document details the procedures to use for requesting additional roles and permission lists. The CFS Security Guide document provides the operational guide to CFS security.

- **Production Data Change Request**
  Production data correction that cannot be implemented via the application will follow the procedure for requesting and implementing a data change request. This information applies only to the CFS Application incident management.

- **Service Request**
  Incidents that fall into the “Miscellaneous” categories are handled through the normal IT Service Center routings – namely, by opening a Service Request ticket with the appropriate CTIs. Examples include requests to clear the cache, reboot a server, etc.

### Urgent Resolution Escalation

If a change or update is required urgently, CMS Management and Central Security Administration can approve these revisions for expedited implementation into production. All changes approved and implemented under urgent escalations will be reviewed and approved after the fact by the appropriate change control review group. Any changes not approved after the fact will be remediated.
4.0 Permissions / Actions Supported

Individuals in the CFS Production Support group will be authorized to:

- Request a Database Support Account
- Request allocation of a production support instance (clone)
- The campus DSA can provide the CFS Production Support analyst with temporary security changes for access to production clones for issue resolution.

4.1 Request Database Support Account

This is done via the [Database Support Account Process Guide](#). The Database Support Account process is used to provision read-only accounts in any database environment to support a reported incident created in Remedy. Any member of the CFS Production Support group may request via the Finance Application Support Manager a database support account via this process. The account is de-provisioned at the resolution of the incident.

4.2 Request Clones

As a delivered service for CFS production support, CMS will deliver a production clone that is refreshed every two weeks and can be used to duplicate production issues. Before submitting a request for another production clone, the Production Support analyst will determine if the weekly cloned instance can be utilized to troubleshoot and resolve the reported incident. If not, the following outlines the process for cloning a campus database into a production support instance and creating IDs and passwords for access:

1. Problem identified and ticket created.
2. Problem assigned to CFS Production Support analyst.
3. CFS Production Support analyst has identified need for specific clone requirement.
4. The ticket is assigned to CMS to request the clone.
5. The CFS production database is cloned into a production support instance by CMS.
6. A new password is created for Oracle/SQL tool access for the Username “SYSADM” (i.e., the command to change password (“chg_pwd”) is run in Unix) by CMS.
7. A Data Mover script is run by CMS to create the User ID and password for general user access.
8. The User ID/Password (for User access) and Username/Password (for Oracle access) are entered into a secured spreadsheet maintained by CMS.
9. CFS Production Support analyst is notified of the newly cloned database and provided with User ID and password.

4.3 Apply Temporary Security Changes

The campus DSA can provide the CFS Production Support analyst with the ability to adjust security to open up access to others that may be needed to help troubleshoot and test the reported incident.

**Note! All Level 1 data will be scrambled in clones.** If the incident requires that production data be included (i.e. to troubleshoot an instance for 1099 processing, or other process requiring valid Level 1 data), an exception process will be followed that will lock down and limit the security access to only pre-identified individuals, and only for a specific length of time. All individuals with access to non-scrambled production data must have a valid CSU Security Clearance Form on file at the Office of the Chancellor.
4.4 Implement Production Data Changes

The following outlines the review and approval process for submitting and migrating production data changes.

- The **CFS Production Support** analyst who is supporting the ticket and coordinating the data change opens the service request and attaches the appropriate documentation. The timeline for processing the request will correspond to the existing severity code matrix guidelines published in the *ITSC Incident Management Procedures*.

- The **CFS Application Team** will perform a high-level review for basic issues. This is not intended to be a thorough validation of the data changes submitted as it is expected that the submitted request is a tested change. After review, the CFS Application Team will assign the ticket to Enterprise Technical Services.

- **Enterprise Technical Services** will schedule and run the SQL script in a target production environment. Upon completion, the ticket will be updated and resolved.

5.0 Post Resolution Process

For incidents which need access to existing or additional clones a fixed duration is required. When the duration is reached, the following de-provisioning steps will be executed. If additional time is required, the Production Support analyst must request an extension.

CMS steps for de-provisioning:

- Remove accounts created via the Database Support Account Process.
- De-provision any production support instances (clones) allocated to incident.
- Remove any temporary application security changes required to resolve incident.

6.0 Questions?

Campuses that have further questions about the CFS Production Support process are encouraged to submit their questions to **cfs@calstate.edu**