HOSTING / INFRASTRUCTURE PLAN

Clark County School District

Report date: June 28, 2013

Objectives:

Supported Environments

Database Access

Data Retention and Restoration

Custom Development Environments

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Document Change Control

The following is the control for revisions to this document.

Version	Date of Issue	Author(s)	Brief Description of Change
1.0	5/23/2013	David Rappath	Original document template
1.1	6/05/2013	Kelvin Beck	Updated formatting, updated the signature page, added revised Custom Development Environments statement on page 6.
Revision 2	6/19/2013	Greg Halopoff, Kim Boyle	Final review and edits

Definition

The following are definitions of terms, abbreviations and acronyms used in this document.

Term	Definition
IC	Infinite Campus
SIS	Student Information System
CCSD	Clark County School District

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Overview

This document details the Hosting/Infrastructure plan for CCSD.

Services Provided

Hosting/Infrastructure services provided with Campus Cloud Choice Plus:

- Hardware and network infrastructure to support:
    - Production and Replicated Production environments
    - Sandbox, Staging and Development Environments
    - Training Environments
    - SSRS reporting server

This includes all necessary infrastructures to provide hot fail over to a secondary data center in the event of equipment or internet connectivity failure at the primary location.

- All operating systems software
- Anti-virus software
- Hardware systems monitoring and alerting
- Periodic data refreshes of the Sandbox, Staging Training and Development environments
- Infinite Campus version updates all supported environments

Supported Environments

Production - The production environment is a web application and database. This environment is where users conduct day to day work. This includes all reports generated by Infinite Campus.

Replicated Production - Extracts for custom reporting and third party applications have the potential to adversely affect database performance. To prevent performance issues in the production database, Infinite Campus will configure SQL Transactional replication of the production database to a separate Campus Cloud database server. Connections from the client machines to the replicated production data base will be made using https basic authentication.   There will not be a web application associated with the replicated data base.

Sandbox - The sandbox environment shares a web application with production. When the production environment is updated to a newer version, the sandbox environment is also updated to that version. It is intended to be a place for a district to test data changes prior to deploying them in production.   Infinite Campus hosting will refresh this environment with data from the production environment at the request of the customer.

Staging - The staging environment is a database and a web application. This is where the District will review new releases prior to putting them into production.   This environment will also serve as the pre-production test deployment site for custom code, extracts and reports developed by CCSD. Infinite Campus hosting will refresh this environment with data from the production environment at the request of the customer. This environment is a full copy of the Production Environment

Training Environments - Infinite Campus Hosting will set up Cloud base application and data base server to support

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CCSD training environments. Each training environment will consist of a distinct web application and database. These environments will be clones of the CCSD training master and will be refreshed on a pre-determined schedule.

Development Environments - Infinite Campus will produce a database that will serve as the master for CCSD personal to preform development activities.   This will be a subset of the production data base. IC will provide the CCDS development staff training on the building and maintenance of their development environments.

Database Access

Clark County School District personnel with a business need to access the Production, Sandbox, Staging, Replicated and Development Environments will be given ODBC accounts to the respective environments. The appropriate access level's (Sys Admin, Read/Write, or Read Only) will be granted by Infinite Campus Hosting after receiving the release form signed by the account holder and the designated authorizing authority at CCSD. Accounts are modified or deleted using the same process. In the event a CCSD employee that has backend access to the databases is separated from the District, a support case should be created followed by a call to Infinite Campus Hosting to have the account(s) immediately deactivated.

Data Retention and Restoration

IC will provide CCSD access to a storage volume that has seven days of full snapshots of the production data available in the event that CCSD would need to do partial data restoration to the production data base. In additionally, fourteen days of production backups will be available on the same storage volume in the event that the required data falls outside the seven day period covered by the production snapshots. Outside this twenty one day window IC will retain a monthly backup for a three month period, then a quarterly backup and one yearly backup. These additional backups will be archived on a separate volume and will be made available to CCSD upon request.

Custom Development Environments

The following approach to the development environment was what was originally envisioned at the time of the RFP response. Further discussions have recently occurred between Infinite Campus and CCSD to increase the automation of the development environments. Additional change control discussion is required to move that alternate model forward.

On an as needed basis up to five virtual development environments will be provided by Hosting at any one time. The development environments will be copies of a development master database. The development master database will be a subset of the CCSD production database. Hosting will provide CCSD development staff training on how to create a code package that can be deployed to any non-development environment. Once code is ready for pre-production testing on a full copy of the production database, Hosting will deploy the code to the Staging environment.   Once CCSD has verified the functionality of the custom code in the staging environment, hosting will deploy the code package to the other environments i.e. production, sandbox, training and development master, in conjunction whit an Infinite Campus version update.

Signature Page

It is agreed that language in this document represents the work to be completed by both the Clark County School District and Infinite Campus. Any changes to the scope of the project may require a change request depending on the nature of the change.

Reviewed and Accepted

Project Steering Committee Signature/Date

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