CANDY INSTALLATION

GENERAL

The Candy Project Control system can operate in several application and data location configurations. Each configuration has its pros and cons and the system administrator must weigh these up to design the best option that fits their business operations.

In terms of user rights, Candy identifies two types of users; Candy administrators with full rights and Candy non-power users with restricted rights.

CANDY USER TYPES

Candy administrative user

The *admin user* is responsible for the installation and maintenance of the Candy software and the Candy licence. This user must update the software and licence promptly when so requested by the system. Candy *admin users* require full administrative rights to the Candy application folder as Candy will require updates and patches to be installed from time to time. This process is automated and can happen from within the application. The Candy network master libraries must be created, maintained, and backed up by the *admin user.*

Candy non-power user

The *non-power* user is restricted by the IT department from installing and updating software on the network or on the user's local hard drive. These user profiles have full access rights to their My Documents folders, Windows roaming and non roaming application data folders, and data home directory. Access rights to other folders are restricted to read only and execution rights. Candy *non-power users* require read only and execution rights to the application folder. The Candy network master libraries can be accessed by this user in read only mode during master selection within the application.

SINGLE USER ENVIRONMENT

The Candy application files, the user data files and the license are located on the computer's local hard drive. In this environment it is advisable to install the Candy application in the

"Program Files" folder. Windows XP and Vista require users to login as administrators to install software and updates, although the program may be operated in a non-privileged mode.

The Candy data folder is best located in the users "My Documents" folder. This will ensure that the user always has read write access to the data and the data is secure from other users who are using the computer with a different profile. If data needs to migrate or get backed up automatically, the "My Documents" folder is easy to identify and already contains other required data.

The user is responsible for the installation, updates, and patches of the Candy application. Backup of Candy data file is the user's responsibility.

PEER TO PEER ENVIRONMENT (P2P)

P2P systems are based on a distributed computing model in which peers share computer resources and exchange services directly. In P2P systems computers, can act as network clients or servers. To be effective, users must share a hard drive with full rights to all users. Users can share data files, applications, printers and other network resources. This environment tends towards low network security. Application response times is highly coupled to network resources. Data file backups can be centrally managed with some effort.

The Candy application, user data files, and licence can be located in various combinations to suite the user's operational requirements.

CLIENT SERVER ENVIRONMENT (C/S)

C/S systems are based on a distributed computing model in which nodes share computer resources and exchange services through a dedicated network control computer, called the server. The server handles the communication needs of the other computers in the network. Users can share folders with read write access to controlled user groups. Users can share data files, applications, printers and other network resources. Very high network security. Computers with Windows operating systems with the same security capabilities and file operating systems can operate in this environment.

Data file backups can be centrally managed with ease. Application response times are highly coupled to network resources.

CANDY NETWORK INSTALLATION

GENERAL

The Candy installer is Windows compatible. The install file is compressed to about 10mb and can be downloaded easily from the Candy website. The installation requires 30mb of disc space. The Candy installer is user friendly and requires only the location of the folder as input from the user. The user that installs Candy requires administrative rights to the application folder to create and copy the folders and files.

CANDY APPLICATION

The Candy application is a Windows 32 bit native Intel code application obeying the Windows Portable Execution model. The Windows resource DLLs required by the application are generated using the Microsoft Visual Studio development platform. Candy can be installed and implemented on any platform that is compatible with the Windows Network Operating System and obeys the Windows File Operating System rules. The Candy client does not require any software installation. The Candy application server installation has all required software and application data available to run a Candy client.

CANDY ON A WAN

The Candy application can be run in a thin client server environment using MicroSoft Terminal Services or equivalent 3rd party software (eg Citrix).

CANDY DATA

The Candy data is stored in a CCS propriety database management system (DBMS). This ensures that the Candy data is accurate, secure and can be retrieved at real time speeds. The DBMS is scalable and can be implemented in a client server environment, peer-to-peer, and single user system without much user intervention. The DBMS relies on the Windows network operating system to provide user access and security to the data. The Candy DBMS

does not require any 3rd party software installation and therefore does not interfere with existing commercial DBMS installations on the user's computer or network.

The Candy DBMS system uses and obeys a subset of the Win32® File API that makes it compatible with most File, Server, and Network operating systems that do the same. Other file operating systems, 3rd party disc cache tools and server configurations that do not emulate the Win32® File API fully will not execute the Candy system correctly. The Candy system uses the Win32® file sharing, file locking and record locking API. If non Microsoft file and network systems are used, they must obey the Microsoft Network Client services fully to operate the Candy system correctly. If non Microsoft systems are used the latest network operating system and software patches must be installed, and configuration settings on servers must be considered to prevent data loss.

CANDY LICENCE

The Candy licence mechanism is supported on Win32® File systems. The Candy licence will fail on Unix, Linux and DOS based servers that do not emulate the Win32® File API correctly. Virus protection software and archive utilities that tamper with file attributes, and properties of the licence file will cause it to fail.

NETWORK LICENCE

The Candy licence can be installed on a LAN to make it available to more users. The Candy *admin user* requires full rights to Candy licence location. Candy *non-power users* require read only access to the licence location.

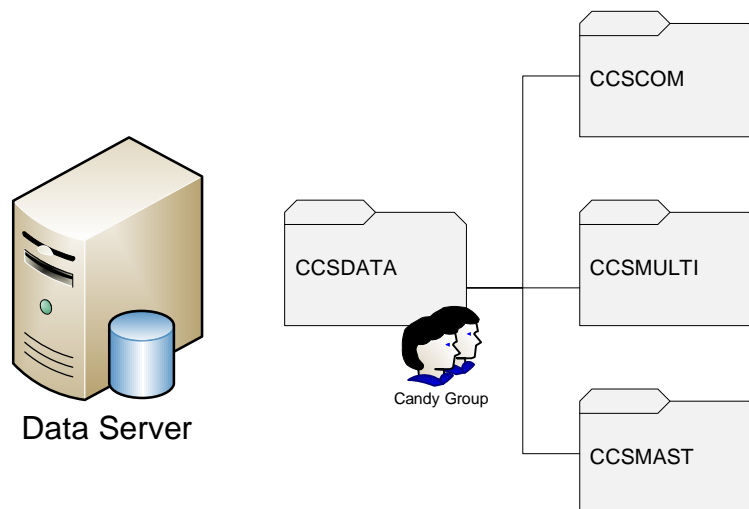## SETTING UP THE CANDY APPLICATION SERVER

On the application server create the folder *CCSAPPS.* This folder must be shared with full rights to the Candy *admin user*. The Candy *non-power* users require read only and execution rights to this folder. Install the Candy application in the subfolder *CCSWIN* in the folder *CCSAPPS.* Within the folder *CCSAPPS,* create the subfolder *CCSAPPS\CCS.* This folder will contain the Candy licence.
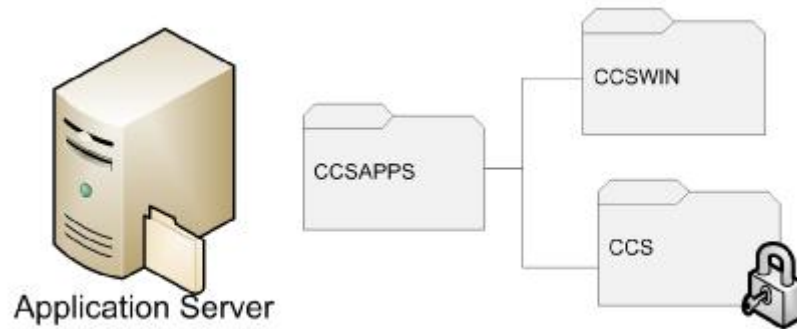
SETTING UP THE CANDY SHARED DATA SPACE

On the data server create the folder *CCSDATA*. This folder must be shared with full rights to both Candy *admin* and *non-power* users. The CCSDATA folder will contain all Candy data that are intended to be shared among the Candy user group. Within the *CCSDATA* folder create the following sub folders:

§   *..\CCSDATA\CCSCOM* (contains the Candy backups shared by the user group);

§   *..\CCSDATA\CCSMAST* (contains the Candy network master libraries); and

§   *..CCSDATA\CCSMULTI* (contains the Candy multi user concurrent accessed libraries)

SETTING UP THE USER'S CANDY DATA SPACE

On the data server each user will have a unique data home directory. This ensures that application information is stored separately for each user in a multi-user environment. In

each user's home directory create the sub folder *CCSDATA*. The Candy user requires full rights to this folder which will contain all the Candy data and archive backups of this user. This folder can be backed up with the other application information of the user during organisational disaster recovery protection procedures.
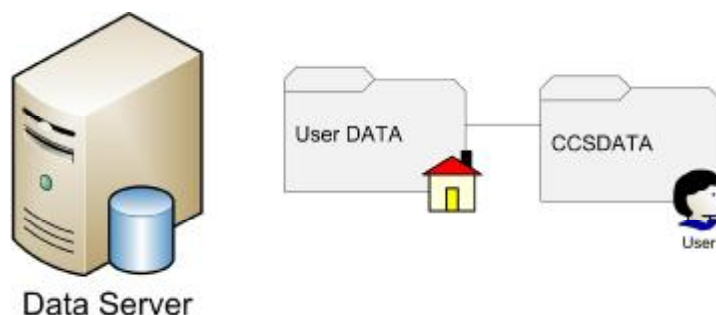
SETTING UP THE CANDY CLIENT

GENERAL

The Candy file management system is compatible with network mapped drives and UNC path names. To launch the Candy application on the client the executable file *CCSVFX.EXE* must be run.

§   "*\\<computer name>\<share name>\CCSWIN\SYSTEM\CCSVFX.EXE*" for UNC.

§   "*X:\CCSWIN\SYSTEM\CCSVFX.EXE*" for network mapped drive.

LAUNCHING THE CANDY APPLICATION

A Windows shortcut or link file can optionally be used to assist the user in launching the Candy application. The shortcut can be installed on the user's Windows desktop using the Candy icon for easy identification. If the user needs to be guided to the location of the preferred Candy data folder, the *start in folder* option of the shortcut file properties can be set to point to Candy data location path, for example "*<user home directory>\CCSDATA*". The user can access other data folder locations using the *"data folder manager"* within the Candy application.

FIRST TIME LAUNCH

On the first time launch of Candy the system will prompt the user to login. The user will be required to enter a user name, initials, and company name. These settings are important information and will used in the following manner during the operations of the application:

- § User name:
  - o Password and licence settings.
- § User initials:
  - o The first three characters must be unique in the Candy user group. These characters will be recorded against data modifications and identification of users when using the system in multi user concurrent mode.

- § Company name:
  - o Licence settings and system information for support.

The Candy login details can be modified on the company manager document using the *"Company"* drop down menu.

Candy Licence

If the Candy licence is not automatically detected at the licence folder *"..\CCSAPPS\CCS"* the user must use the *"change"* tab on licence dialog and select the *"licence path"* option to point to correct licence folder.

Candy Shared Data

To get access to the shared Candy data folders, *"common backups"; network master libraries"*; and *"multi user concurrent access libraries"*, the folder paths must be set for the user. Using the *"My Candy Settings"* tool and the option *"Folders and Paths"* set the following paths accordingly:

Common Backups:

- § *"\\<computer name>\<share name\CCSDATA\CCSCOM"* for UNC.

- § *"X:\CCSCOM"* for network mapped drive.

Candy Network Masters:

§ *"\\\<computer name>\\<share name\\CCSDATA\\CCSMAST"* for UNC.

§ *"X:\\CCSMAST"* for network mapped drive.

Multi User Company:

§ *"\\\<computer name>\\<share name\\CCSDATA\\CCSMULTI"* for UNC.

§ *"X:\\CCSMULTI"* for network mapped drive.

Archive Backups

Each Candy user must have a unique data folder to store their personal backups of important information. This folder is the *"archive backups".* To set the archive folder use the *"My Candy Settings"* tool and the option *"Folders and Paths"* set the archive backups path accordingly:

§ *"<user home directory>\\CCSDATA"*

The user's settings will be stored in the Candy configuration file *"CCS.INI"* in the Windows virtual folder *"My Documents\\My CCS".*