



Tech note

Migration from SafeCom G2 to SafeCom G3

This Tech note is for administrators and technicians that have working experience with SafeCom G2. The Tech note describes what has changed in SafeCom G3 compared to SafeCom G2 and gives advice on how to update to SafeCom G3. This Tech note applies to SafeCom G3 version S82 070.420*06.

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1 Introduction

The aim of this Tech note is to make your transition to SafeCom G3 - the next level of SafeCom Smart Printing - as easy as possible. If you have any feedback, please send this to feedback@safecom.eu

1.1 SafeCom Insite

SafeCom G3 software and manuals will be available on [SafeCom Insite](#). Training guides, videos and certifications are updated to reflect use of SafeCom G3.

1.2 Documentation

Solution Design Manual

- [SafeCom Smart Printing Solution Design Manual D10909](#)
is a new manual intended for IT professionals involved in designing solutions where the print service is built around the concepts of SafeCom Smart Printing and SafeCom G3.

SafeCom Smart Printing

- [SafeCom Smart Printing Administrator's Quick Guide D10600](#)
has been updated to reflect use of SafeCom G3.

SafeCom G3

- [SafeCom G3 Administrator's Manual D60603](#)
replaces [SafeCom G2 Administrator's Manual D60600](#)
- [SafeCom G3 Cluster Administrator's Manual D60620](#)
replaces [SafeCom G2 Cluster Administrator's Manual D60615](#)
- [SafeCom G3 Client Billing User's Guide D60627](#)
replaces [SafeCom G2 Client Billing User's Quick Guide D60607](#)

SafeCom G3 Web Interface

- [SafeCom G3 Web Interface Administrator's Manual D60604](#)
replaces [SafeCom G2 Web Interface Administrator's Manual D60602](#)

Other manuals

- [SafeCom G3 Administrator API Reference Manual D60822](#)
replaces [SafeCom G2 Administrator API Reference Manual D60802](#)
- [SafeCom G3 Batch Print API Reference Manual D60823](#)
replaces [SafeCom G2 Batch Print API Reference Manual D60803](#)
- [SafeCom G3 Administrator DLL Programmer's Manual D60824](#)
replaces [SafeCom G2 Administrator DLL Programmer's Manual D60804](#)
- [SafeCom G3 Disaster Recovery Manual D60621](#)
replaces [SafeCom G2 Disaster Recovery Manual D60611](#)
- [SafeCom G3 Enterprise Disaster Recovery Manual D60622](#)
replaces [SafeCom G2 Enterprise Disaster Recovery Manual D60612](#)

2 FAQ - Frequently asked questions

2.1 Is SafeCom G3 more expensive?

No, the price for SafeCom G3 is the same as for SafeCom G2. The current price list is available on [SafeCom Insite](#). Click **Sales** and then **Price List**.

2.2 Does SafeCom G3 require a new license key?

Yes, a new SafeCom license key is required to use SafeCom G3. Customers with a valid maintenance agreement can request a SafeCom G3 upgrade license key through [SafeCom Insite](#). Click **Logistics** and then **License key**. You are required to supply the current license key.

2.3 Why update to SafeCom G3?

All the benefits of buying into the concept of SafeCom Smart Printing still hold through with the introduction of SafeCom G3.

- Simplify printer infrastructure
- Centralize administration and control
- Reduce current print costs by 40%

SafeCom G3 adds these benefits:

- Reduce number of print servers
- Minimize need for bandwidth

2.4 How is the update performed?

SafeCom G3 version S82 070.420*06 and newer does NOT function with Microsoft SQL Server 2000 and MSDE, so these databases must be migrated prior to performing the update to SafeCom G3.

SafeCom provides a tool that allows migration from MSDE to SQL Server 2008 R2 Express. In a solution with multiple SafeCom servers the tool must be run on each SafeCom slave server well in advance of the actual update process. See also: [SafeCom Tech Note D20197](#).

If the SafeCom G2 version is older than S82 070.380*09, then extra steps may be required (3.10).

2.5 What about support of SafeCom G2?

End of Life Notification: Support for SafeCom G2 ends on July 1, 2015. Only in rare cases will patches be released to SafeCom G2. The rule is that reported issues will be addressed in SafeCom G3. SafeCom G2 software and manuals will remain available through [SafeCom Insite](#).

3 Technical overview

3.1 List of new features

The table below lists important new functionality in SafeCom G3 that is not present in SafeCom G2.

SafeCom G3 functionality	Description
SafeCom Print Client	Reduce number of servers and need for network bandwidth by installing SafeCom Print Client on users' computers and/or print servers, where it will store pending documents locally instead of transferring them to the user's home server. If there is no connection to the SafeCom server printing is still possible, because the SafeCom Print Client ¹ allows the user to print direct to previously used printers. When the connection is restored tracking data is transferred to the server.
Hostname support	Server and device addresses can be specified as hostnames (3.3).
Multiple domains	Distinguish users from different domains even if they have the same user name (3.4).
Unicode support	Handle user names and document names in for example Chinese and Japanese (3.5).
Enhanced encryption	AES encryption support and possible to choose stronger encryption level (3.7).
Enhanced Client Billing	Register billing codes with any job that is tracked by the SafeCom solution. Billing code can be selected at: A) Print submission via popup dialog, B) On the touch-screen control panel of selected MFPs, or C) Via web interface.
Failover ² of SafeCom Device Server	Failover capabilities for SafeCom Device Server when used with newer HP FutureSmart devices.
Improved device support	Resend configuration to device from SafeCom Administrator. Support for SafeCom Go for Fuji Xerox and Samsung. Improved SafeCom Device Utility.
Save-O-Meter widget	The SafeCom Save-O-Meter gives an instant overview of print volumes and environmental savings. Display the SafeCom Save-O-Meter widget live on your intranet to show employees how much they help save every day.

¹ SafeCom Print Client version S82 070.420*07.

² Requires SafeCom G3 version S82 070.420*06 or newer and SafeCom Device Server version S82 060.050*02 or newer.

3.2 System requirements

The system requirements are the same as for SafeCom G2, with the exception that Windows 2000 is NOT supported.

- Windows 2008 and 2003 SP2 (both 32-bit and 64-bit).
For demo purpose it can also run on Windows 7, Windows Vista and Windows XP SP2.
- Virtualization software, such as VMware and Microsoft Virtual Server, is supported as long as it supports the Operating System.
- 1.4 GHz CPU (recommended 2 GHz or faster) and 2 GB RAM or greater.
To take advantage of 4 GB or more physical memory it is necessary enable PAE X86 (Physical Address Extension) on 32-bit Windows systems.
Refer to microsoft.com.

Database

- Microsoft SQL Server 2008 R2 Express is distributed with the software and **REQUIRES** Microsoft .Net Framework 3.5 SP1 and Windows Installer 4.5.
Please visit microsoft.com to download and install these prior to the installation of SafeCom G3.
- In a SafeCom multi server installation the master server must run Microsoft SQL Server 2008 or 2005.

Note: *Microsoft SQL Server 2000 and MSDE is not support by SafeCom G3 version S82 070.420*06 and migration to newer database MUST be performed prior to update (2.4).*

Refer to 1.10 in [D60603](#) for the complete requirements.

3.3 Hostnames

All server and device addresses can now be specified as hostnames or IP addresses. The addresses localhost and 127.0.0.1 can both be used.

3.4 Multiple domains

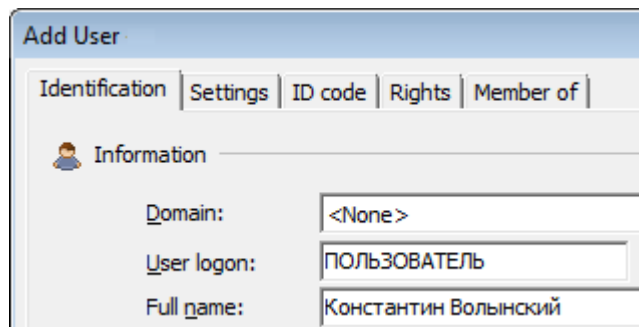
A domain can be specified (and imported) as part of a user's properties. User logon does not have to be unique across domains. A user John Smith (JS) within domainA is different from the user John Smith (JS) within domainB.

3.5 Unicode

With Unicode support SafeCom G3 can handle texts, such as user names and document names in for example Chinese and Japanese. Storing and handling Unicode requires more space and as a consequence each tracking record occupies 2 KB instead of 1 KB in SafeCom G2. See also section on version dependency (3.9).

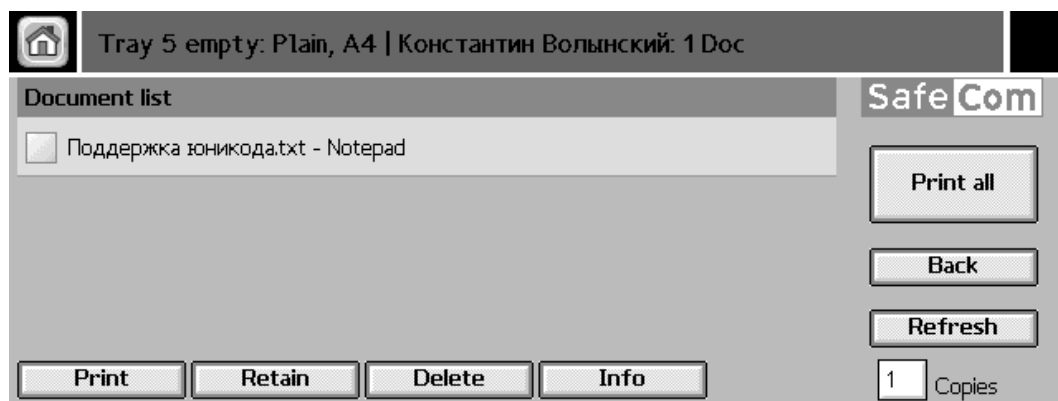
Example:

The user properties dialog for a Russian user.



The screenshot shows the 'Add User' dialog box with the 'Identification' tab active. Under the 'Information' section, the 'Domain' is set to '<None>', the 'User login' is 'ПОЛЬЗОВАТЕЛЬ', and the 'Full name' is 'Константин Волинский'.

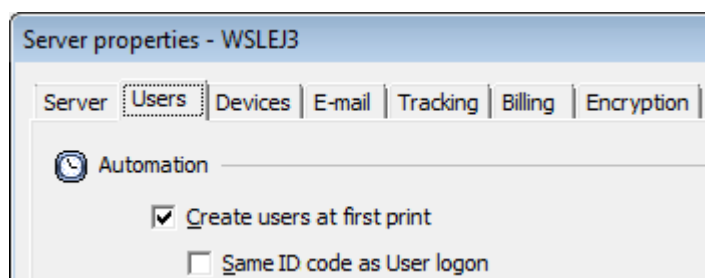
The same Russian user logged into a SafeCom Go HP device:



The screenshot shows the SafeCom Go HP device interface. The top bar displays 'Tray 5 empty: Plain, A4 | Константин Волинский: 1 Doc'. The 'Document list' section shows a document named 'Поддержка юникода.txt - Notepad'. The bottom bar contains buttons for 'Print', 'Retain', 'Delete', and 'Info'. The right side features 'Print all', 'Back', and 'Refresh' buttons, along with a '1 Copies' indicator.

Same ID code as User logon:

Please observe that the function **Same ID code as User logon** does not work if the user's logon contains Unicode characters.



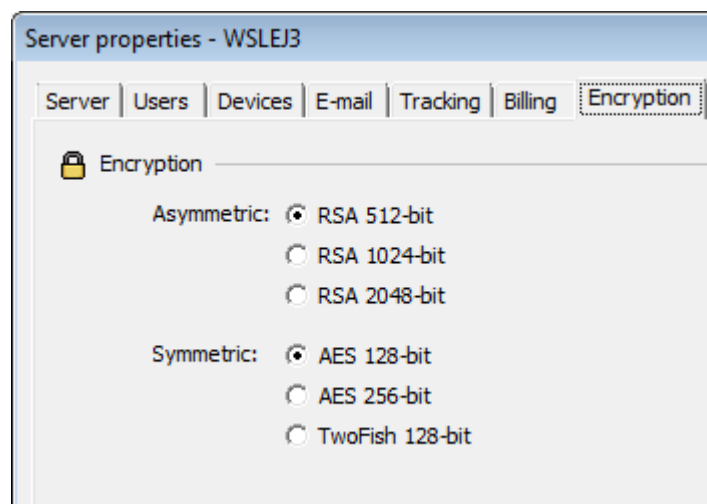
The screenshot shows the 'Server properties - WSLEJ3' dialog box with the 'Users' tab active. Under the 'Automation' section, the checkbox for 'Create users at first print' is checked, and the checkbox for 'Same ID code as User logon' is unchecked.

3.6 IDs and ID codes

The term ID and ID code is used widely in place of the terms card and code. For example in **SafeCom Administrator** the **User properties** dialog now features an **ID code** tab instead of the former **Card/Code** tab.

3.7 Enhanced encryption and AES support

SafeCom G3 offers a flexible choice of stronger encryption of the network traffic between the components in the SafeCom solution.



On new installations the network communication will by default be encrypted with RSA 512-bit and AES 128-bit. On updated installations the default is RSA 512-bit and TwoFish 128-bit. See also section on version dependency (3.9).

3.8 Databases

Connection to the SafeCom databases is done using the more efficient ADO (ActiveX Data Objects) instead of ODBC (Open DataBase Connectivity).

All databases must be backed up before the update. This is especially important as databases will be inconsistent if the database runs out of disk space during the update.

A cleanup of tracking data prior to update is strongly advised. However the servers also support keeping the existing tracking database unchanged and can use it together with a newly created Unicode tracking database.

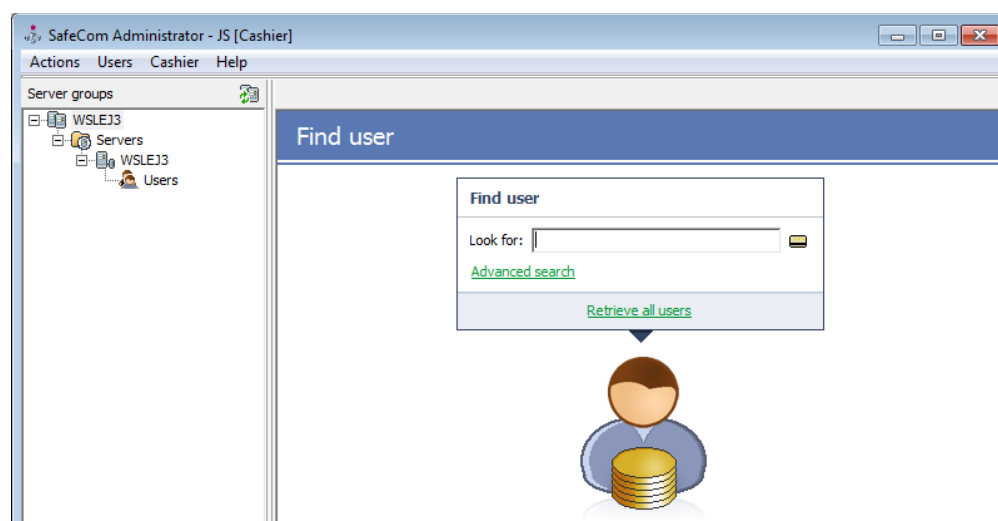
With Unicode support tracking records occupy about 2 KB instead of 1 KB. Please adjust database sizes and database maintenance routines to account for this.

SafeCom G3 comes with SQL Server 2008 R2 Express instead of MSDE. MSDE is not support by SafeCom G3 version S82 070.420*06 (2.4).

3.9 Version dependencies

The SafeCom G3 server software version is backward compatible with the protocols used by **SafeCom Go** devices, **SafeCom Controllers**, **SafeCom Pull Port** and **SafeCom Push Port** and any other component. This means that these components work with the SafeCom G3 server software, but should be updated at a later stage to take full advantage of Unicode support (3.5) and enhanced encryption (3.7).

SafeCom Administrator that comes with the SafeCom G3 server software can and must be used with the SafeCom G3 server software only. This means that any tools installation of these must be updated as well. All Cashier functionality is now integrated in **SafeCom Administrator** that offers a dedicated and simplified mode for Cashier users. **SafeCom Cashier** has been discontinued.



SafeCom Web Interface can be used with the SafeCom G3 server software, but must be updated to version S82 070.410*04 or newer to take full advantage of Unicode support (3.5) and enhanced encryption (3.7). SafeCom G3 Web Interface version S82 072.410*04 requires SafeCom G3 Server.

SafeCom Port Configurator that comes with the SafeCom G3 server software can only be used the SafeCom G3 servers. SafeCom Port Configurator works also with SafeCom G2 versions of the SafeCom Pull Port and SafeCom Push Port.

SafeCom Reports must be updated to version S82 076.410*04 or newer to work with the SafeCom G3 server software. New SafeCom Reports works with SafeCom G2 Server (backward compatible).

3.10 Updating from older SafeCom G2 versions

If you are updating from a SafeCom G2 version older than S82 070.340*05 you are advised to update to SafeCom G2 version S82 070.380*09, before updating to SafeCom G3 (2.4).

If you are updating a SafeCom multi server solution running SafeCom G2 version S82 070.360 or S82 070.370 you **MUST** install scLicenseManager.dll version 8.38.1.1 on all the slaves prior to update.

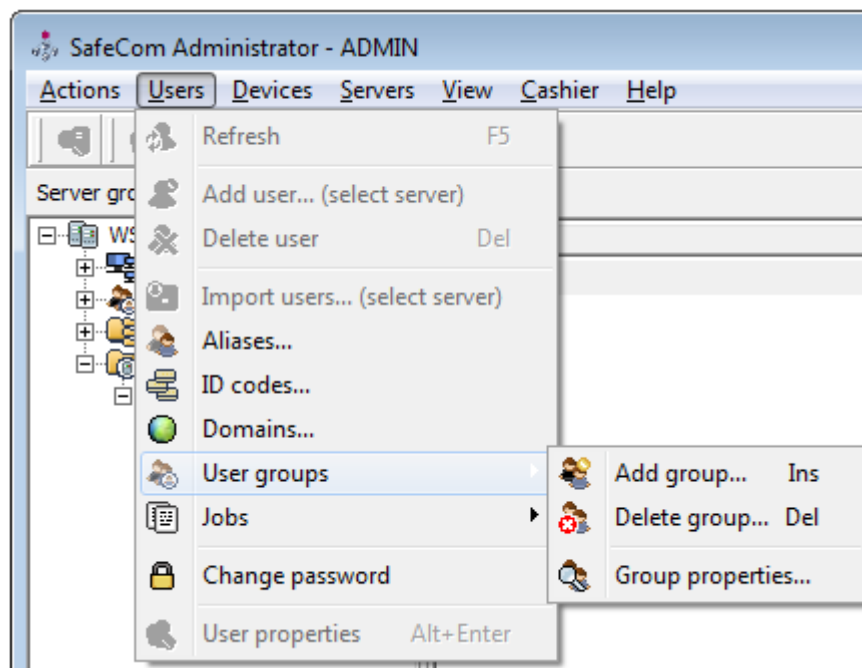
3.11 Multi server update

All the SafeCom slave servers must be updated before the SafeCom master server. MSDE is not support by SafeCom G3 version S82 070.420*06 and migration from MSDE (2.4) must be performed before the update. The installation will not function properly before all servers are updated to the same version. Once all servers are updated the solution can take full advantage of Unicode support (3.5) and enhanced encryption (3.7).

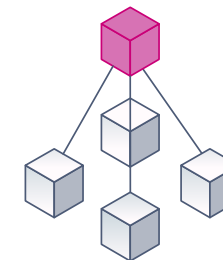
It is best practices to use change management during the update process and avoid any other changes to the system.

3.12 SafeCom Administrator - Simplified menus

The menu structure has been simplified in **SafeCom Administrator** and icons have been added to ease use and navigation. SafeCom G3 menu structure is listed in Table 1 on page 11 and SafeCom G2 menu structure is listed in Table 2 on page 12.



 SafeCom G3 - Menus in SafeCom Administrator						
Actions	Users	Devices	Servers	View	Cashier	Help
Login	Refresh	Refresh	Refresh	SafeCom Assistant	Account status	SafeCom online
Logout	Add user	Add device	Add server	Toolbars	Cash flow report	About
Test server	Delete user	Delete device	Delete server	View server group info	Money loader log	
Export	Import users	Send Go Loader	License	Expand server view at login	ePay	
Server group	Aliases	Update software	Repair Replication**			
Options	ID codes	Restart	Branches			
Exit	Domains	Resend configuration*	Organizational units			
	User groups	Open in web browser	Device Servers**			
	Jobs	Monitor setup	Rule Based Printing			
	Change password	Charging schemes	Client Billing			
	User properties	Device properties	Tracking data			
			Statistics			
			Event log			
			Server properties			



SafeCom
Administrator

* Introduced with SafeCom G3 Server version S82 070.410*07

** Introduced with SafeCom G3 Server version S82 070.420*06

Tech note
Migration from SafeCom G2 to SafeCom G3

 SafeCom G2 - Menus in SafeCom Administrator							
Actions	Group	Server	Users	Jobs	Devices	Preferences	Help
Locate server groups	Login	Refresh	Refresh	Refresh	Refresh	Options	SafeCom online
Test server	Logout	Add server group	Add user	Auto-retrieve	Monitor setup	SafeCom Assistant	About
Cashier	Change password	Delete server group	Delete user	Delete job	Add device	View	
Reports	License	Server group properties	Import users		Delete device		
Export	Rule Based Printing	Add server	Aliases		Send Go Loader		
Exit	Billing codes	Delete server	User cards		Update software		
	Import billing codes	Server properties	User properties		Restart		
	Schedule billing code imp	Event log			Open in web browser		
	Organizational units				Charging schemes		
	User groups				Device properties		
	Statistics						
	Export tracking data						
	Delete tracking data						