



**SARK UCS/MVP TDM/IP PBX  
Quick-start Installation Guide  
Hot Desk Feature**

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## ***SARK Introduction***

SARK UCS/MVP is a hybrid TDM/IP PBX softswitch for the SMB/SME market segment. It is based upon Digium's *Asterisk* soft-switch running on SME Server Linux, a hardened variant of CentOS. SARK UCS/MVP has established a reputation for being extremely reliable, highly functional and particularly well equipped for remote support, making it very attractive to resellers. Moreover, it is well able to compete with traditional proprietary PBX platforms while offering a much lower overall cost-of-ownership to the user. SARK-HA (High Availability) is a cluster solution which delivers fully automatic failover.



## ***Platform Options***

SARK UCS/MVP is available in several different hardware models as follows: –

<b>MODEL</b>	<b>DESCRIPTION</b>	<b>Slots</b>	<b>MEMORY</b>	<b>Storage</b>
500	Embedded system	2	256Mb	4Gb Flash
650	Entry Level desk top	1	512Mb	80Gb SATA
850	1U rack mount	1	1Gb	80Gb SATA
1000	1U rack mount	1	1Gb	80Gb SATA
1200	2U rack mount	3	2Gb	160Gb SATA
1500	2U rack mount	3	2Gb	160Gb SATA

All units are capable of running their own inboard telephony gear. The 650 is restricted to 4xFXO ports or 2 ISDN2e ports. All other models can be fitted with either analog or digital cards, giving the larger systems the ability to manage up to 120 TDM voice channels (lines) per module.

## ***SARK Hot Desk***

### **Overview**

SARK UCS “hot desk” has been designed to provide telephony facilities for workers who spend a large percentage of their time off-site or mobile within a site but who also require a full time “office” extension, to receive and distribute voicemail. These employees will often require “real” telephone terminals, while working at the corporate office.

### **Features**

- True hot desk, not a 'follow me' or forward.
- Supports MWI for the virtual extension
- Supports full customization including
  - extension specific BLF
  - extension specific Speed-dials
  - Any extension specific setting that can be provisioned

### **In Use**

Hot desk users will each be allocated a unique “VXT” extension number on the system. A VXT extension behaves in exactly the same way as a normal extension with the sole exception that it won't always be attached to a real phone.

A hot-desk user can begin a hot-desk session by keying a feature code into any hot-desk compatible phone. The feature IVR will request the user's VXT extension and a pin ( for simplicity, in practice the hot-desk users' voicemail password is used for the pin). Provided the correct credentials are entered then the hot-desk phone will be automatically re-provisioned with the VXT user's settings. Once initialised, the hot-desk extension will make and receive calls as if it were the VXT extension. It should also be noted that VXT extensions can be associated with DDI's, voice mail boxes and call forwards in exactly the same way as real extensions. In this way if the VXT extension is called either directly or via a DDI when it is not physically mapped to a real phone, then it will simply drop to voicemail or apply any outstanding call-forwards which may have been set.

### **Mechanics**

In order to deploy hot desking we must define a set of new “VXT” terminal types to the SARK system. VXT terminals behave in exactly the same way as regular hardware terminals and they can have their own personal or group Voicemail boxes, with voice-to-email if required. VXT terminals can be mapped and remapped to different physical

end-points, via a set of feature codes in SARK. There are two (2) new codes; a *login* function and a *logout* function.

*Login* will cause the automatic re-provisioning of the hard phone to have the VXT identity (this can include things like MWI, BLF settings and speed-dials).

*Logout* will remove a previously assigned VXT identity and set the underlying phone back to its default extension.

### **Virtual Extension (VXT) number range**

It is a good idea to use a different number range for your VXT extensions. For example, if your real extension series is 5xxx then you might choose 3xxx for your VXT extensions. This makes it easy for users to see at a glance whether a phone is running as a virtual extension or not.

### **Housekeeping**

SARK includes a housekeeping Daemon which automatically clears down VXT extensions after 12 hours. It also allows users to log-in to a hot-desk phone even though they may already be logged in at some other phone. In such cases, the old log-in is automatically released and the new phone provisioned in the normal way. This allows users to move around a campus type environment logging in wherever they need to receive calls.

### **Restrictions**

In general, the hot-desk phones must all be of the same type and manufacture. This is because the VXT provisioning files must be capable of being understood by the hot-desk phones. In some cases, for example, Aastra phones, this can span several models in the range however for some manufacturers the phones all need to be of the same model.

When a re-provision is done, SARK will send a SIP notify to the phone to force it to read the new provisioning file it has created for it. Depending upon the phone manufacture and type, this may involve the phone physically rebooting.

## Setup

In order to use the hot desk feature you must install the SARK-HD rpm which is available from your distributor or reseller.

Once installed, you will need to decide on your hot-desk pool (primarily the phone type you are going to use for hot-desk ops). You will then need to set up a VXT device template for your users. Templates for popular phone types (Snom Aastra etc) will be installed as part of the SARKHD base install and you can tailor these to your own requirements. All that is necessary to create a VXT template is that the device type has *VXT* at the end of the regular name. So for example, to create a VXT device for the Sark device *Snom 320*, you would create a device called *Snom 320 VXT*

The SARK template parser will simply look for the string *VXT* at the end of the device name and assume that it is dealing with a VXT phone type. It will also use the beginning of the string to check that the physical phone type you are attempting to log into is compatible with your VXT phone type.

You can now use your VXT template(s) to set up VXT extensions, each with there own provisioning rules.

## Using Hot-desk

By default the feature keys are set as follows...

*0+{ <i>VXT extension</i> }	Log in
*1	Log out.
*2	Log out from another extension

So, for example, to log in VXT extension 2005 you would do

\*02005

The system will then challenge for the voicemail password of 2005 so if, for example, the password was 2233 then you would enter

2233#

This will cause the phone to be re-provisioned which may take a few seconds depending upon the phone type.

When you have finished your hot-desk session you can simply enter \*1 to log out. The system will re-provision the phone back to its default state.