

Mitel 6800i Series SIP Phones

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4.1.0 RELEASE NOTES

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Mitel 6800i Series SIP Phones 4.1.0 Release Notes

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ABOUT THIS DOCUMENT

This document provides details on new features and/or issues resolved for the Mitel 6800i series (6863i, 6865i, 6867i, and 6869i) SIP phones for Release 4.1.0.



Note: This release applies to the phone models mentioned above only.

For more detailed information about features associated with each phone, and for information on how to use the phones, see your model-specific *SIP Phone Installation Guide* and the *SIP Phone User Guide*. For detailed information about more advanced features, see the *6800i Series SIP Phones Administrator Guide* and/or the *Development Guide XML API For Mitel SIP Phones*.

RELEASE NOTES TOPICS

Topics in these release notes include:

- General Information
- New Features in Release 4.1.0
- Additional Information
- Issues Resolved in Release 4.1.0
- Contacting Mitel Support

GENERAL INFORMATION

RELEASE CONTENT INFORMATION

This document provides release content information on the Mitel 6800i series SIP phone firmware.

MODEL	RELEASE NAME	RELEASE VERSION	RELEASE FILENAME	RELEASE DATE
6863i	Generic SIP	4.1.0	FC-001429-01 REV00	June 2015
6865i	Generic SIP	4.1.0	FC-001430-01 REV00	June 2015
6867i	Generic SIP	4.1.0	FC-001431-01 REV00	June 2015
6869i	Generic SIP	4.1.0	FC-001432-01 REV00	June 2015

HARDWARE SUPPORTED

This release of firmware is compatible with the following Mitel SIP portfolio products:

- 6863i
- 6865i
- 6867i
- 6869i

BOOTLOADER REQUIREMENTS

This release of firmware is compatible with the following Mitel SIP portfolio product bootloader versions:

- 6863i: Boot2 1.0.0.0 or higher
- 6865i: Boot2 1.0.0.0 or higher
- 6867i: Boot2 1.0.0.6 or higher
- 6869i: Boot2 1.0.0.6 or higher

NEW FEATURES IN RELEASE 4.1.0

This section provides the new features in SIP Phone Release 4.1.0. The following table summarizes each new feature and provides a link to more information within this release note. Each feature also specifies whether it affects the Administrator, the User, or the XML Developer.

This table may also provide the documentation location of features that have already been documented in Mitel's documentation suite. Refer to those documents for more information about the applicable feature.

FEATURE	DESCRIPTION
Configuration Features	
Predefined Intercom Key Support (For Administrators and Users)	Previously, users had to manually dial a number after pressing the Intercom key to place an intercom call. Starting with Release 4.1.0, users can now configure the Intercom key with a predefined number allowing for a single key press option to initiate an intercom call. *New for all phones.
Default HTTPS Client Method Update (For Administrators)	An update has been implemented with regards to the default HTTPS client method used by the phone when communicating with the HTTPS server. By default in Release 4.1.0, the phone will initially attempt to communicate using TLS 1.0. If the TLS protocol is rejected, the phone will automatically switch to the SSL 3.0 protocol. *New for all phones.
Configurable BLF/List Key Behavior When in an Active Call (For Administrators)	Previously applicable to BLF keys only, Administrators can now configure the phone's behavior when a BLF/List key is pressed during an active call. If the " blf key mode " parameter is defined as "0" (default), the number corresponding to the BLF/List key will be sent as DTMF tones in the active call. If defined as "1", the active call will be placed on hold and the phone will place a call to the BLF/List number using the next available line. *New for the 6865i, 6867i, and 6869i.
Remote Rebooting and Dynamic Reloading of the Configuration Files (For Administrators)	New check-sync-related behavior has been introduced in Release 4.1.0. Upon a check sync NOTIFY message with a "reboot" variable defined, the phone will (depending on the "reboot" variable definition) either immediately reboot the phone or reload all the parameter settings in the configuration files without rebooting. *New for all phones.

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FEATURE	DESCRIPTION
Record on Demand (ROD) XML Toggle Key Support (For Administrators)	Previously, two separate XML keys were required if users wanted the ability to utilize the Active VoIP Record on Demand (ROD) feature. In Release 4.1.0, Administrators can create one XML key that can be used to start and stop the ROD feature by use of toggle functionality. *New for all phones.
Collapsed Softkey Screen Offset Parameters (For Administrators)	The " collapsed softkey screen " parameter (i.e. the parameter controlling the positioning of programmed softkeys on the 6867i and 6869i SIP phones) has now been complemented with two additional "offset" parameters giving Administrators more control over softkey positioning. *New for the 6867i and 6869i.
6863i and 6865i Hard Key Reprogramming (For Administrators)	Configuration parameters have been introduced in Release 4.1.0 allowing Administrators the ability to reprogram, with any one of the phone's softkey functions, the two Line hard keys (applicable to both phones) as well as the Redial, Callers, Conference, and Transfer hard keys (applicable to the 6865i). *New for the 6863i and 6865i. Feature previously available in the 6867i and 6869i.
SSL Certificate Subject Alternative Name (SAN) Support (For Administrators)	The 6800i Series SIP phones now support Subject Alternative Names (SANs) in Release 4.1.0 when validating SSL certificates. *New for all phones.
Comodo RSA, DigiCert, GoDaddy, Mitel MBG, and TrustZone SSL Certificate Support (For Administrators)	With Release 4.1.0, the SIP phones now support the validation of Comodo RSA, DigiCert, GoDaddy, Mitel MiVoice Border Gateway (MBG), and TrustZone SSL certificates. *New for all phones.
Configurable Visitor Desk Phone Login/Logout Security Behavior (For Administrators)	Using the " hot desk high security " parameter, Administrators are now able to define whether or not Visitor Desk Phone (VDP) users have to enter their credentials every time they want to log out of the phone. This same parameter will also define whether or not the user needs to re-enter their credentials on restarts of an already logged in phone. *New for all phones.
G.722.1 Audio Codec Support (For Administrators)	The 6800i Series SIP phones now support the G.722.1 audio codec. The ITU-T <i>Recommendation G.722.1</i> describes G.722.1 as a codec used for "low complexity coding at 24 and 32 kbit/s for hands-free operation in systems with low frame loss". *New for all phones.

FEATURE	DESCRIPTION
SIP Features	
<p>Offering Registration State Upon Startup</p> <p>(For Administrators)</p>	<p>When the SIP registrar IP has not been configured (i.e. the IP is 0.0.0.0) but an Action URI registration event has been defined, the phones will now perform a GET on the registration event Action URI upon startup.</p> <p>This behavior has been implemented in Release 4.1.0 to allow certain monitoring tools the ability to more accurately monitor the phone's registration states (i.e. even when the phone is unregistered at startup).</p>
<p>Multiple Voicemail Registration</p> <p>(For Administrators and Users)</p>	<p>Multiple voicemail registration is now supported on the 6865i, 6867i, and 6869i SIP phones in Release 4.1.0. By configuring a softkey or programmable key as "Speeddial/MWI" and defining call and voicemail URIs, users can monitor and listen to pending messages on multiple voicemail accounts.</p> <p>*New for the 6865i, 6867i, and 6869i.</p>
<p>Tcpdump Network Packet Capture Support</p> <p>(For Administrators)</p>	<p>Tcpdump network packet capture functionality is now natively available on the phones in Release 4.1.0. Administrators can start/stop packet capturing, configure capture ports, set how long the capture should last, and retrieve the capture file through the Advanced Settings > Capture page on the phone's Web UI.</p> <p>*New for all phones.</p>
<p>MiCloud Telepo Music on Hold Support</p> <p>(For Administrators)</p>	<p>MiCloud Telepo "music on hold" functionality is now supported on the 6800i Series SIP phones in Release 4.1.0. If a media server SIP address is defined using the "sip moh server" parameter, the phone will use the specified server to provide an audio stream to any held parties.</p> <p>*New for all phones.</p>
<p>MiCloud Telepo Call Park/Pickup Support</p> <p>(For Administrators)</p>	<p>With Release 4.1.0, the phones are now interoperable with the call park/pickup method used by the MiCloud Telepo for Service Providers call manager.</p> <p>*New for the 6865i, 6867i, and 6869i.</p>
<p>MiCloud Telepo Directed Call Pickup Support</p> <p>(For Administrators)</p>	<p>Improvements have been made in Release 4.1.0 with regards to the directed call pickup feature specifically for interoperability with the MiCloud Telepo for Service Providers call manager.</p> <p>*New for the 6865i, 6867i, and 6869i.</p>
UI Features	
<p>Greek Screen and Input Language Support</p> <p>(For Administrators and Users)</p>	<p>The Greek language is now supported on the 6867i and 6869i SIP phones. Users can change their screen language to view all SIP phone UI and Web UI text in Greek as well as change their phone's input language allowing them to input Greek characters using the dialpad on the phone.</p> <p>*New for the 6867i and 6869i.</p>

FEATURE	DESCRIPTION
<p data-bbox="248 260 609 317">K680i Live Keyboard Support for XML Applications</p> <p data-bbox="248 365 609 394">(For Administrators and Users)</p>	<p data-bbox="646 260 1338 405">The Live Keyboard feature was introduced in Release 4.0.0 SP1, which, when enabled, would wake up the phone and automatically launch the Directory search function if an alphabetic character key on an attached K680i keyboard was pressed.</p> <p data-bbox="646 415 1338 472">In Release 4.1.0, the Live Keyboard feature can now be used in conjunction with XML applications (e.g. XML-based directories).</p> <p data-bbox="646 520 1338 548">*New for the 6867i and 6869i.</p>

ADDITIONAL INFORMATION

CONFIGURATION FEATURES

PREDEFINED INTERCOM KEY SUPPORT

Previously, users of the 6800i Series SIP phones had to manually dial a number after pressing the Intercom key to place an intercom call. Starting with Release 4.1.0, users can now configure the Intercom key with a predefined number allowing for a single key press option to initiate an intercom call.

Users can configure an Intercom key with a predefined number using the Mitel Web UI while Administrators can configure an Intercom key with a predefined number using the Mitel Web UI as well as the configuration files.

Configuring an Intercom Key with a Predefined Number Using the Mitel Web UI

Use the following procedure to configure an Intercom key with a predefined number using the Web UI:

1. Click on **Operation > Programmable Keys**
or
Click on **Operation > Softkeys and XML**
or
Click on **Operation > Expansion Module <N>**

Softkeys Configuration

Bottom Keys		Top Keys		
Key	Type	Label	Value	Line
1	Icom	Intercom	4200	1
2	None			1
3	None			1
4	None			1
5	None			1

2. Choose an available key and in the **Type** field, select **Icom**.
3. (If applicable) In the **Label** field, enter a label to apply to this key (e.g. Intercom)
4. In the **Value** field, enter the predefined number you wish to be dialed when the Intercom key is pressed (e.g. 4200).



Note: If no value is defined, users will need to manually enter a number after pressing the Intercom key.

5. Click **Save Settings**.

Configuring an Intercom Key with a Predefined Number Using the Configuration Files

To configure an Intercom key with a predefined number using the configuration files, you must enter "icom" for the key type. For the label (6867i/6869i/M685i only), enter a key label to assign to the Intercom key (e.g. Intercom). For the value, enter the predefined number you wish to be dialed when the Intercom key is pressed (e.g. 4200).



Note: If no value is defined, users will need to manually enter a number after pressing the Intercom key.

The following parameters are examples you can use to configure the Intercom key (with a predefined number) using the configuration files:

For Bottom Softkeys

```
softkey1 type: icom  
softkey1 label: Intercom  
softkey1 value: 4200
```

For Top Softkeys

```
topsoftkey1 type: icom  
topsoftkey1 label: Intercom  
topsoftkey1 value: 4200
```

For Programmable Keys

```
prgkey1 type: icom  
prgkey1 value: 4200
```

For Expansion Module Softkeys

```
expmod1 key1 type: icom  
expmod1 key1 label: Intercom  
expmod1 key1 value: 4200
```

For Hard Keys

```
hardkey1 type: icom  
hardkey1 value: 4200
```



Note: Refer to the *6800i Series SIP Phones Release 4.1.0 Administrator Guide* for more information on how to configure softkeys, programmable keys, expansion module keys, and hard keys using the configuration files.

DEFAULT HTTPS CLIENT METHOD UPDATE

An update has been implemented with regards to the default HTTPS client method used by the phone when communicating with the HTTPS server. In previous releases, the following two options were available:

- **SSL 3.0** (default) - SSL 3.0 is a commonly-used protocol for managing the security of message transmission on the Internet.
- **TLS 1.0** - TLS 1.0 is a protocol that ensures privacy between communicating applications and their users on the Internet. TLS is the successor to SSL.


By default in Release 4.1.0, the phone will initially attempt to communicate using TLS 1.0. If the TLS protocol is rejected, the phone will automatically switch to the SSL 3.0 protocol.

Administrators can configure the HTTPS client method through the phone's native UI, Web UI, or by defining the "**https client method**" in the configuration files. Options now include:


- **TLS Preferred** (default).
- **SSL 3.0**.
- **TLS 1.0**.

Configuring the HTTPS Client Method Using the SIP Phone UI

For the 6863i/6865i:

1. Press  on the phone to enter the Options List.
2. Select **Administrator Menu**.
3. Select **Configuration Server**.
4. Select **HTTPS Settings**.
5. Select **HTTPS Client**.
6. Select **Client Method**.
7. Press **Change** to select a client method to use for HTTPS. Valid values are:
 - TLS Preferred (default)
 - SSL 3.0
 - TLS 1.0
8. Press **Done** to save the changes.

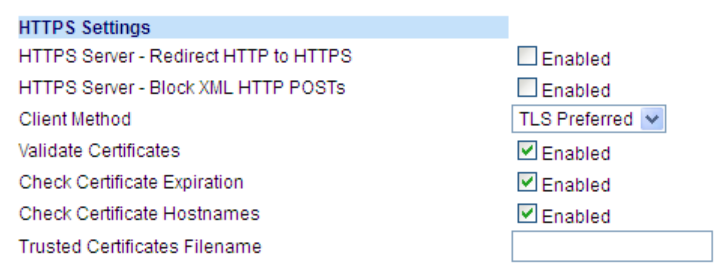
For the 6867i/6869i:

1. Press  on the phone to enter the Options List.
2. Press the **Advanced** softkey.
3. Enter the Administrator password using the keypad. Default is “**22222**”.
4. Select **Configuration Server**.
5. In the **Download Protocol** field, select **HTTPS**.
6. In the **HTTPS Client Method** field, press a client method value to use for HTTPS. Valid values are:
 - TLS Preferred (default)
 - SSL 3.0
 - TLS 1.0
7. Press the **Save** softkey.

Configuring the HTTPS Client Method Using the Mitel Web UI

Use the following procedure to configure the HTTPS client method using the Mitel Web UI:

1. Click on **Advanced Settings->Network->HTTPS Settings**.



2. Select an HTTPS client method to use from the **HTTPS Client Method** field. Valid values are:
 - TLS Preferred (default)
 - SSL 3.0
 - TLS 1.0
3. Click **Save Settings** to save your settings.

Configuring the HTTPS Client Method Using the Configuration Files

Use the following parameter to configure the HTTPS client method using the configuration files:

PARAMETER – <i>https client method</i>	CONFIGURATION FILES startup.cfg, <model>.cfg, <mac>.cfg
DESCRIPTION	<p>Defines the security method that the client advertises to the server during the Secure Socket Layer (SSL) handshake. Available options are:</p> <ul style="list-style-type: none"> • TLS 1.0 - The phone will attempt to communicate using TLS 1.0 only. TLS 1.0 is a protocol that ensures privacy between communicating applications and their users on the Internet. TLS is the successor to SSL. • SSL 3.0 - The phone will attempt to communicate using SSL 3.0 only. SSL 3.0 is a commonly-used protocol for managing the security of a message transmission on the Internet. • TLS Preferred - The phone will initially attempt to communicate using TLS 1.0. If the TLS protocol is rejected, the phone will automatically switch to the SSL 3.0 protocol.
FORMAT	Alphanumeric characters
DEFAULT VALUE	TLS Preferred
RANGE	TLS 1.0 SSL 3.0 TLS Preferred
EXAMPLE	https client method: TLS 1.0

CONFIGURABLE BLF/LIST KEY BEHAVIOR WHEN IN AN ACTIVE CALL

Previously applicable to BLF keys only, Administrators can now configure the phone's behavior when a BLF/List key is pressed during an active call. If the "**blf key mode**" parameter is defined as "0" (default), the number corresponding to the BLF/List key will be sent as DTMF tones in the active call. If defined as "1", the active call will be placed on hold and the phone will place a call to the BLF/List number using the next available line.

Configuring BLF and BLF/List Key Behavior When in an Active Call Using the Configuration Files

Use the following parameter to configure BLF and BLF/List key behavior using the configuration files:

PARAMETER	CONFIGURATION FILES
<i>blf key mode</i>	startup.cfg, <model>.cfg, <mac>.cfg
DESCRIPTION	Specifies the behavior when a BLF or BLF/List key is pressed during an active call. If the parameter is defined as "0" (default), the number corresponding to the BLF or BLF/List key will be sent as DTMF tones in the active call. If defined as "1", the active call will be placed on hold and the phone will place a call to the BLF or BLF/List number using the next available line.
FORMAT	Integer
DEFAULT VALUE	0
RANGE	0 - 1 0 (DTMF in active call) 1 (Active call placed on hold and BLF or BLF/List number dialed out using the next available line)
EXAMPLES	blf key mode: 1

REMOTE REBOOTING AND DYNAMIC RELOADING OF THE CONFIGURATION FILES

New check-sync related behavior has been introduced in Release 4.1.0. Upon a check-sync NOTIFY message with a "reboot" parameter defined, the phone will (depending on the "reboot" parameter definition) either immediately reboot the phone or reload all the settings in the configuration files without rebooting.



Note: Feature availability is dependant on the call manager. The check-sync NOTIFY message from the call manager must contain a defined "reboot" parameter.

Feature behavior is as follows:

- If a check-sync NOTIFY containing the parameter "reboot=true" is received by the phone, the phone will automatically reboot itself.
- If a check-sync NOTIFY containing the parameter "reboot=false" is received by the phone, the phone will reload the configuration files without rebooting. Any dynamic parameters in the configuration files (i.e. those that do not require a reboot for changes to be applied) will be synchronized accordingly.

RECORD ON DEMAND (ROD) XML TOGGLE KEY SUPPORT

Previously, two separate XML keys were required if users wanted the ability to utilize the Active VoIP Record on Demand (ROD) feature. In Release 4.1.0, Administrators can create one XML key that can be used to start and stop the ROD feature by use of toggle functionality.

By using the vertical bar or "pipe" (i.e. |) character as a separator in the XML key value field, Administrators can define two XML values that when called upon starts and stops the ROD feature. For example the XML key value could be defined as:

```
http://10.105.102.69:8080/VOIP?START&OPN=$$SIPUSERNAME$$ |
http://10.105.102.69:8080/VOIP?STOP&OPN=$$SIPUSERNAME$$
```



Note: XML key labels (if available) can also contain two values separated by a vertical bar. The label will change accordingly when the ROD XML key is pressed. If the label does not contain two values, the single label will be shared between both states.

When the vertical bar is used the phone recognizes that the key has toggle functionality and therefore applies two states to the key that affects LED, label, and value behavior. When the ROD XML key is pressed, the HTTP request is sent by the phone and if the phone receives a 200 OK message the LED and label will toggle accordingly.

For example, if a 200 OK is received in response to starting the ROD feature, the LED will turn on and the label will change to its secondary value, or alternatively, if a 200 OK is received in response to stopping the ROD feature, the LED will turn off and the label will change back to its initial value.



WARNING: THE ROD STATE INDICATED BY THE XML KEY IS ONLY BASED ON THE 200 OK EVENT. THE SENDING OF THE 200 OK BY THE CALL MANAGER HAS NO GUARANTEE ATTACHED TO IT THAT RECORDING WILL STOP/START (DEPENDING ON THE CALL MANAGER, A 200 OK MAY BE SENT TO THE PHONE EVEN IF THERE ARE ERRORS IN THE HTTP/XML MESSAGE).

Configuring ROD XML Toggle Keys Using the Mitel Web UI

Use the following procedure to configure ROD XML toggle keys using the Mitel Web UI:

1. Click on Click on **Operation->Softkeys and XML**.
or
Click on **Operation-> Programmable Keys**.
or
Click on **Operation->Expansion Module Keys**.

Softkeys Configuration

Bottom Keys | Top Keys

Key	Type	Label	Value	Line
1	XML	Start Stop	http://10.105.102.69:8080/VOIP?START&OPN=\$\$SIPUSERNAME\$\$ http://10.105.102.69:8080/VOIP?STOP&OPN=\$\$SIPUSERNAME\$\$	1
2	None			global
3	None			global
4	None			global
5	None			global

2. Select a key that you want to use to execute the ROD feature.
3. In the "**Type**" field, select "**XML**".
4. (If available) In the "**Label**" field, enter a label to apply to this key (e.g. "Start|Stop").



Note: XML key labels (if available) can contain two values separated by a vertical bar. The label will change accordingly when the ROD XML key is pressed. If the label does not contain two values, the single label will be shared between both states.

5. In the "**Value**" field, enter two URIs to apply to this key separated by a vertical bar. For example:

```
http://10.105.102.69:8080/VOIP?START&OPN=$$SIPUSERNAME$$ |
http://10.105.102.69:8080/VOIP?STOP&OPN=$$SIPUSERNAME$$
```

6. Click **Save Settings** to save your settings.

Configuring ROD XML Toggle Key Using the Configuration Files

To configure an ROD XML toggle key using the configuration files, you must enter "**xml**" for the key type. For the label (if available), enter key labels to assign to the toggle key (e.g. "Start|Stop").



Note: XML key labels can contain two values separated by a vertical bar. The label will change accordingly when the ROD XML key is pressed. If the label does not contain two values, the single label will be shared between both states.

For the value, enter two URIs to apply to this key separated by a vertical bar. For example:

```
http://10.105.102.69:8080/VOIP?START&OPN=$$SIPUSERNAME$$ |
http://10.105.102.69:8080/VOIP?STOP&OPN=$$SIPUSERNAME$$
```

The following parameters are examples you can use to configure the Record-On-Demand XML key:

For Bottom Softkeys

```
softkey1 type: xml
softkey1 label: Start|Stop
softkey1 value:
http://10.105.102.69:8080/VOIP?START&OPN=$$SIPUSERNAME$$ |
http://10.105.102.69:8080/VOIP?STOP&OPN=$$SIPUSERNAME$$
```

For Top Softkeys

```
topsoftkey1 type: xml
topsoftkey1 label: Start|Stop
topsoftkey1 value:
http://10.105.102.69:8080/VOIP?START&OPN=$$SIPUSERNAME$$ |
http://10.105.102.69:8080/VOIP?STOP&OPN=$$SIPUSERNAME$$
```

For Programmable Keys

```
prgkey1 type: xml
prgkey1 value:
http://10.105.102.69:8080/VOIP?START&OPN=$$SIPUSERNAME$$ |
http://10.105.102.69:8080/VOIP?STOP&OPN=$$SIPUSERNAME$$
```

For Expansion Module Softkeys

```
expmod1 key1 type: xml
expmod1 key1 label: Start|Stop
expmod1 key1 value:
http://10.105.102.69:8080/VOIP?START&OPN=$$SIPUSERNAME$$ |
http://10.105.102.69:8080/VOIP?STOP&OPN=$$SIPUSERNAME$$
```

For Hard Keys

```
hardkey1 type: xml
hardkey1 value:
http://10.105.102.69:8080/VOIP?START&OPN=$$SIPUSERNAME$$ |
http://10.105.102.69:8080/VOIP?STOP&OPN=$$SIPUSERNAME$$
```



Note: Refer to the *6800i Series SIP Phones Release 4.1.0 Administrator Guide* for more information on how to configure softkeys, programmable keys, expansion module keys, and hard keys using the configuration files.

COLLAPSED SOFTKEY SCREEN OFFSET PARAMETERS

The "**collapsed softkey screen**" parameter (i.e. the parameter controlling the positioning of programmed softkeys on the 6867i and 6869i SIP phones) has now been complemented with the following two additional parameters giving Administrators more control over softkey positioning:

- **collapsed softkey screen offset bottom**: Defines the offset for locking or collapsing the bottom softkeys.
- **collapsed softkey screen offset top**: Defines the offset for locking or collapsing the top softkeys.

If the "**collapsed softkey screen**" parameter is enabled (i.e. defined as "1") and an offset parameter such as "**collapsed softkey screen offset bottom: 4**" is defined, the first four bottom softkeys will not be taken into consideration when collapsing (i.e. essentially locking the first four bottom softkeys and collapsing the rest).

Alternatively, the inverse is true whereby, if the "**collapsed softkey screen**" parameter is disabled (i.e. defined as "0") and an offset parameter such as "**collapsed softkey screen offset bottom: 4**" is defined, all bottom softkeys except the first four will not be taken into consideration when collapsing (i.e. essentially collapsing the first four bottom softkeys and locking the rest).



Notes:

1. The range of the "offset" parameters is dependant on the SIP phone model. Values not in range will be ignored.
2. For the 6867i, the range for the "**collapsed softkey screen offset bottom**" and "**collapsed softkey screen offset top**" parameters are 1 - 17 and 1 - 19 respectively.
3. For the 6869i, the value for the "**collapsed softkey screen offset bottom**" and "**collapsed softkey screen offset top**" parameters are 1 - 23 and 1 - 43 respectively.

For example, the 6869i has a total of 24 bottom softkeys and 44 top softkeys. If the configuration file for the phone contains the following defined parameters:

```
collapsed softkey screen: 1
collapsed softkey screen offset top: 0
collapsed softkey screen offset bottom: 4
```

the phone would collapse all the top softkeys (i.e 1 - 44), lock bottom softkeys 1 - 4, and collapse the rest of the bottom softkeys (i.e. 5 - 24).

Alternatively, If the configuration file for the phone contains the following defined parameters:

```
collapsed softkey screen: 1
collapsed softkey screen offset top: 10
collapsed softkey screen offset bottom: 20
```

the phone would lock top softkeys 1 -10, collapse top softkeys 11 - 24, lock bottom softkeys 1 - 20, and collapse bottom softkeys 21 - 44.

With the collapsed softkey screen disabled the inverse would apply. If the configuration file for the phone contains the following defined parameters:

```
collapsed softkey screen: 0
collapsed softkey screen offset top: 0
collapsed softkey screen offset bottom: 4
```

the phone would lock all the top softkeys (i.e 1 - 44), collapse bottom softkeys 1 - 4, and lock the rest of the bottom softkeys (i.e. 5 - 24).

Alternatively, If the configuration file for the phone contains the following defined parameters:

```
collapsed softkey screen: 0
collapsed softkey screen offset top: 10
collapsed softkey screen offset bottom: 20
```

the phone would collapse top softkeys 1 -10, lock top softkeys 11 - 24, collapse bottom softkeys 1 - 20, and lock bottom softkeys 21 - 44.

Configuring the Collapsed Softkey Screen Offset Feature Using the Configuration Files

Use the following parameters to configure the collapsed softkey screen offset feature using the configuration files:

PARAMETER	CONFIGURATION FILES
<i>collapsed softkey screen</i>	startup.cfg, <model>.cfg, <mac>.cfg
DESCRIPTION	Enables or disables the 6867i/6869i from collapsing the softkeys to remove blank keys. When enabled, the phone will remove all the softkeys defined as "None" and display the programmed softkeys in consecutive order. When disabled, the softkey will retain its programmed position. This parameter applies to both top and bottom softkeys.
FORMAT	Integer
DEFAULT VALUE	1 (Enabled)
RANGE	0-1 0 (Disabled) 1 (Enabled)
EXAMPLES	collapsed softkey screen: 0

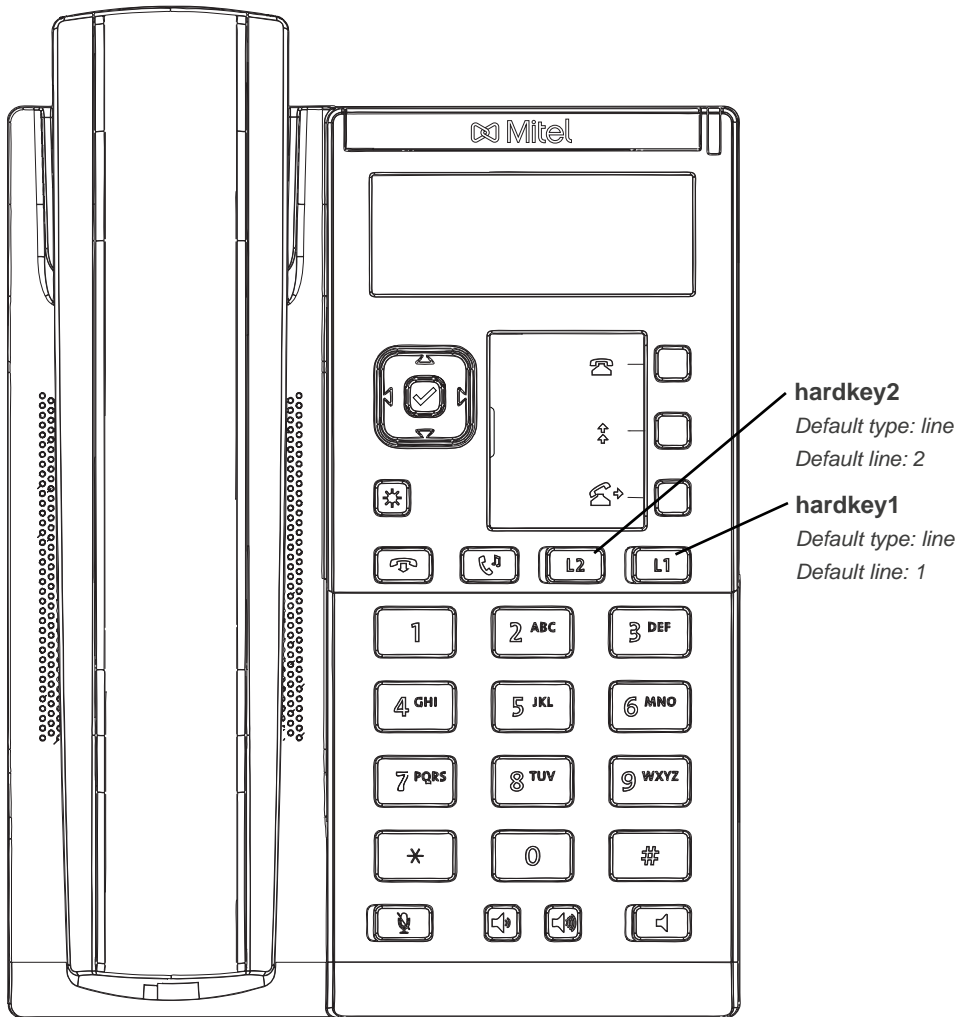
PARAMETER <i>collapsed softkey screen offset top</i>	CONFIGURATION FILES startup.cfg, <model>.cfg, <mac>.cfg
DESCRIPTION	<p>Defines the offset for locking or collapsing the top softkeys.</p> <p>If the "collapsed softkey screen" parameter is enabled, the phone will lock the respective top softkeys (from top softkey 1 to the value defined) and collapse the rest of the top softkeys.</p> <p>If the "collapsed softkey screen" parameter is disabled, the phone will collapse the respective top softkeys (from top softkey 1 to the value defined) and lock the rest of the top softkeys.</p>
FORMAT	Integer
DEFAULT VALUE	0
RANGE	<ul style="list-style-type: none"> • 1 - 19 (6867i) • 1 - 43 (6869i)
EXAMPLES	collapsed softkey screen offset top: 4

PARAMETER <i>collapsed softkey screen offset bottom</i>	CONFIGURATION FILES startup.cfg, <model>.cfg, <mac>.cfg
DESCRIPTION	<p>Defines the offset for locking or collapsing the bottom softkeys.</p> <p>If the "collapsed softkey screen" parameter is enabled, the phone will lock the respective bottom softkeys (from bottom softkey 1 to the value defined) and collapse the rest of the bottom softkeys.</p> <p>If the "collapsed softkey screen" parameter is disabled, the phone will collapse the respective bottom softkeys (from bottom softkey 1 to the value defined) and lock the rest of the bottom softkeys.</p>
FORMAT	Integer
DEFAULT VALUE	0
RANGE	<ul style="list-style-type: none"> • 1 - 17 (6867i) • 1 - 23 (6869i)
EXAMPLES	collapsed softkey screen offset bottom: 2

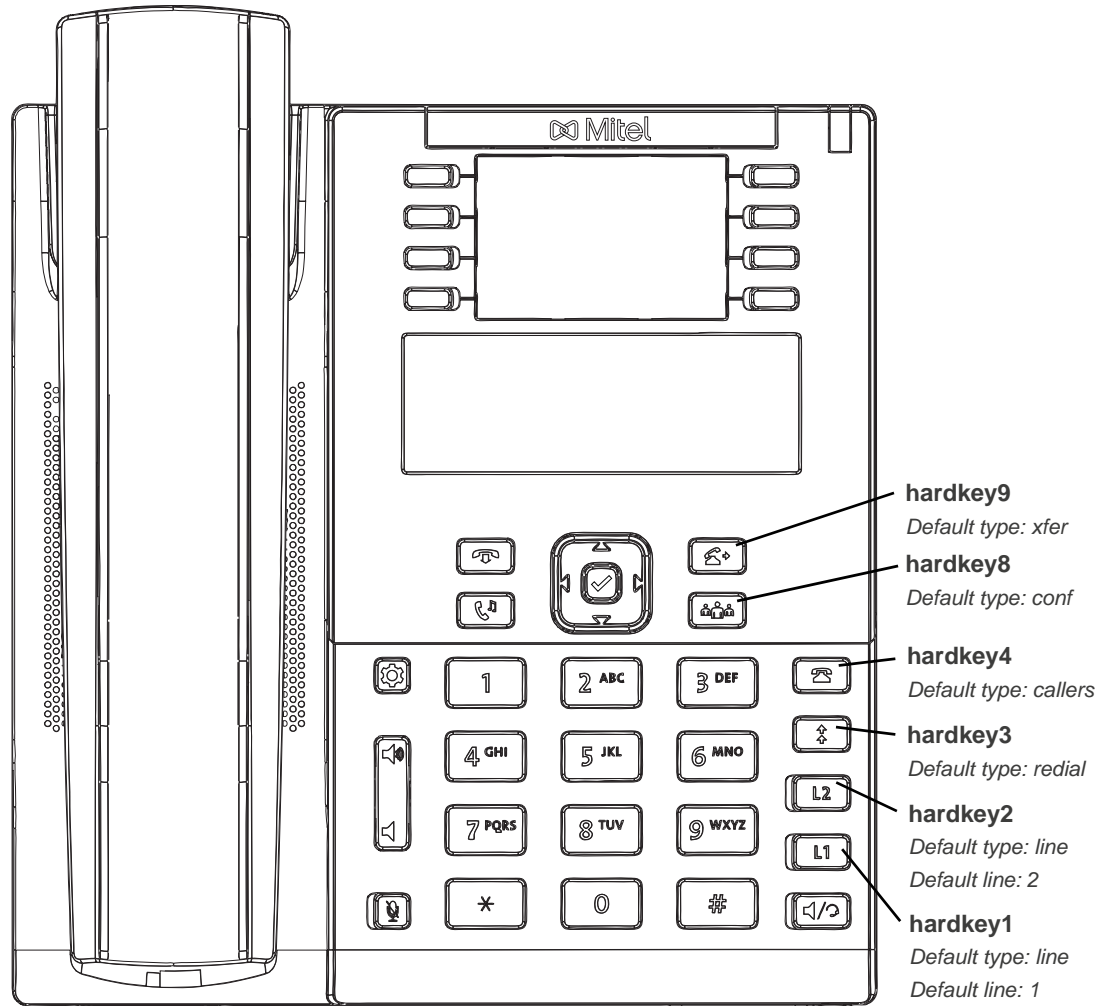
6863I AND 6865I HARD KEY REPROGRAMMING

Configuration parameters have been introduced in Release 4.1.0 allowing Administrators the ability to reprogram, with any one of the phone's softkey functions, the two Line hard keys (applicable to both phones) as well as the Redial, Callers, Conference, and Transfer hard keys (applicable to the 6865i).

6863i Hard Key Mapping



6865i Hard Key Mapping



The following parameters can be used to reprogram the hard keys:

CONFIGURATION PARAMETER	DESCRIPTION
hardkeyN type	The type of key to which you would like to change the hard key. Valid types include: <ul style="list-style-type: none">• none• line• speeddial• dnd• blf (6865i only)• list (6865i only)• acd (6865i only)• xml• flash• spre• park• pickup• lcr• callforward• blfxfer (6865i only)• speeddialxfer• speeddialconf• speeddialmwi (6865i only)• directory• filter (6865i only)• callers• redial• conf• xfer• icom• services• phonelock• paging• hotdesklogin• discreetringing

CONFIGURATION PARAMETER	DESCRIPTION
hardkeyN value	<p>The value you would like to assign to the hard key you are configuring. The “hardkeyN value” parameter can be set for the following key types only:</p> <ul style="list-style-type: none"> • speeddial • line • blf (6865i only) • spre • xml • park • pickup • blfxfers (6865i only) • speeddialxfers • speeddialconf • speeddialmwi (6865i only) • redial • filter (6865i only) • paging
hardkeyN line	<p>The line associated with the hard key you are configuring. The “hardkeyN line” parameter can be set for the following key types only:</p> <ul style="list-style-type: none"> • speeddial • blf (6865i only) • list (6865i only) • acd (6865i only) • park • pickup • lcr • blfxfers (6865i only) • speeddialxfers • speeddialconf • speeddialmwi (6865i only) • redial • filter (6865i only)

In addition to the above basic parameters, the following supplementary parameters can also be used for the hard keys:

CONFIGURATION PARAMETER	DESCRIPTION
hardkeyN locked	<p>Locks the specified hard key on the SIP phones. When enabled, the phone locks the key with the provisioned local settings and prevents users from changing or configuring the key.</p> <p>Note: If no settings are configured locally but the “hardkeyN type” is defined in a configuration file, the phone will lock the key with the key type defined in the configuration file along with any values associated with the additional “hardkeyN” parameters (i.e. “hardkeyN value” and “hardkeyN line”).</p>

CONFIGURATION PARAMETER	DESCRIPTION
hardkeyN ring splash	<p>(6865i, 6867i, and 6869i only)</p> <p>When a key is configured for BLF or BLF/List functionality, this parameter controls the ring splash alert pattern per key. The following alerting patterns are available:</p> <ul style="list-style-type: none"> • 0: Silence (ring splash off). • 1: Normal (same as current BLF ring splash). • 2: Normal delayed (After a delay of [x] seconds, the ring signal that is the same as the current BLF ring splash is played [use the “ring splash delay” parameter to define the delay]). • 3: Periodic (similar to the normal ring signal that is used by the phone itself. The actual ring melody is based on the current melody set for the line to which the BLF or BLF/List key is associated [use the “ring splash frequency” parameter to define the frequency interval]). • 4: Periodic delayed (same as Periodic but after a delay of [x] seconds, the ring signal that is used by the phone is played [use the “ring splash frequency” parameter to define the frequency interval and the “ring splash delay” parameter to define the delay]). • 5: Low volume (same as the current BLF ring splash but at a lower level to be less intrusive). • 6: Low volume delayed (after a delay of [x] seconds, the ring signal that is the same as the current BLF ring splash is played at a lower level [use the “ring splash delay” parameter to define the delay]). • 7: The behavior is determined by the global parameter “play a ring splash”. <ul style="list-style-type: none"> • If “play a ring splash” is defined as 0 then the feature is disabled. • If “play a ring splash” is defined as 1 then the behavior is the same as Normal. • If “play a ring splash” is defined as 2 then the behavior is the same as Normal but the ring splash plays when idle and also during the active call state. • 8: In call delayed (same as Normal delayed but ring splash plays when idle and also during the active call state [use the “ring splash delay” parameter to define the delay]). • 9: In call periodic (same as Periodic but ring splash plays when idle and also during the active call state [use the “ring splash frequency” parameter to define the frequency interval]). • 10: In call periodic delayed (same as Periodic delayed but ring splash plays when idle and also during the active call state [use the “ring splash frequency” parameter to define the frequency interval and the “ring splash delay” parameter to define the delay]). • 11: In call low volume (same as Low volume but ring splash plays when idle and also during the active call state). • 12: In call low volume delayed (same as Low volume delayed but ring splash plays when idle and also during the active call state [use the “ring splash delay” parameter to define the delay]).

Notes:

- Ring tones are based on the current ring tone set configured on the IP phone.
- Ring splashes will not be played if a custom ring tone is selected.

**Notes:**

1. The value of “N” in the above “hardkeyN” parameters corresponds to the hard key’s mapping number as per the *“6863i Hard Key Mapping”* and *“6865i Hard Key Mapping”* figures.
2. Hard keys 1 to 2 on both phones can be remapped to any key type. If applicable, LED indication will follow the color/cadence of the corresponding feature when the key is reprogrammed.
3. Hard keys 3, 4, 8, and 9 on the 6865i can be remapped to any key type except for the following: Line, BLF, BLF/List, Auto Call Distribution, and BLF/Xfer.
4. If a hard key is configured with the type “None”, functionality of the hard key (and its corresponding LED) is disabled.
5. Misconfiguration of the hard key will result in the key going back to its default function. For example, reprogramming hard key 2 (Line 2) to:


```
hardkey2 type: line
hardkey2 line: 33
```

 will result in hard key 2 reverting back to its default Line 2 functionality as the “hardkey2 line: 33” definition is invalid.

Reprogramming Hard Key Functionality Using the Configuration Files

Use the following parameters to reprogram the functionality of hard keys:

PARAMETER –
hardkeyN type

CONFIGURATION FILES
startup.cfg, <model>.cfg, <mac>.cfg

DESCRIPTION

The type of key to which you would like to change the hard key. Valid types include:

- **none** - Indicates no setting for the key.
- **line** - Indicates the key is configured for line use.
- **speeddial** - Indicates the key is configured for speeddial use. You can configure a key to speeddial a specific number by pressing that key. Optionally, you can also configure a Speeddial key to dial prefix numbers. With this option, the prefix numbers automatically dial when you press the key, and the phone waits for you to enter the remaining numbers to dial.
Note: When there is an active call, the Speeddial keys send DTMF digits through the active voice path. To dial out, you have to first put the active call on hold and then press the Speeddial key.
- **dnd** - Indicates the key is configured for Do Not Disturb on the phone.
- **blf** (6865i only) - Indicates the key is configured for Busy Lamp Field (BLF) use.
- **list** (6865i only) - Indicates the key is configured for BLF/List use.
- **acd** (6865i only) - (for Sylanro/BroadWorks servers only) Indicates the key is configured for Auto Call Distribution (called **“Auto Call Distribution”** in the Mitel Web UI). The ACD feature allows the Sylanro/BroadWorks server to distribute calls from a queue to registered IP phone users (agents).

DESCRIPTION

- **xml** - Indicates the key is configured to accept an XML application for accessing customized XML services. You can also specify an XML softkey URL for this option.
- **flash** - Indicates the key is set to generate a flash event when it is pressed. The IP phone generates flash events only when a call is connected and there is an active RTP stream (for example, when the call is not on hold).
- **spre** - Indicates the key is configured to automatically activate specific services offered by the server. For example, if the spre value of *82 is configured, then by pressing the softkey, *82 automatically activates a service provided by the server.
- **park** - Indicates the key is configured to park incoming calls when pressed.
- **pickup** - Indicates the key is configured to pick up parked calls when pressed.
- **lcr** - Indicates the key is configured for the Last Call Return function when pressed.
- **callforward** - Indicates the key is configured for accessing the Call Forward features on the phone. A Call Forwarding Mode must be enabled to use this key. "Account" mode is the default.
- **blfxfer** (6865i only) - Indicates the key is configured to transfer calls AND configured for BLF on a single key.
- **speeddialxfer** - Indicates the key is configured to transfer calls AND configured for speeddialing to a specific number.
- **speeddialconf** - Indicates the key is configured to be used as a Speeddial key AND as a Conference key.
- **speeddialmwi** (6865i only) - Indicates the key is configured to be used as a Speeddial/MWI key.
- **directory** - Indicates the key is configured to access the Directory List.
- **filter** (6865i only) - Indicates the key is configured to activate/deactivate Executive Call Filtering.
- **services** - Indicates the key is set to be used as the Services key.
- **callers** - Indicates key is configured to access the Callers List.
- **redial** - Indicates key is configured to access the Redial List.
- **conf** - Indicates the key is configured as a Conference key.
- **xfer** - Indicates the key is configured as a Transfer key for transferring calls.
- **icom** - Indicates the key is set to be used as the Intercom key.
- **phonelock** - Indicates the key is set to be used to lock/unlock the phone.
- **paging** - Indicates the key is set for Group Paging on the phone. Pressing this key automatically sends a Real Time Transport Protocol (RTP) stream to pre-configured multicast address(es) without involving SIP signaling.
- **hotdesklogin** - Indicates the key is configured to be used as a login key when utilizing the Visitor Desk Phone hotdesk feature.
- **discreetringing** - Indicates the key is configured to toggle Discreet Ringing on/off.

- **speeddialxfer** - Indicates the key is configured to transfer calls AND configured for speeddialing to a specific number.
- **speeddialconf** - Indicates the key is configured to be used as a Speeddial key AND as a Conference key.
- **directory** - Indicates the key is configured to access the Directory List.
- **filter** - Indicates the key is configured to activate/deactivate Executive Call Filtering.
- **services** - Indicates the key is set to be used as the Services key.
- **callers** - Indicates key is configured to access the Callers List.
- **redial** - Indicates key is configured to access the Redial List.
- **conf** - Indicates the key is configured as a Conference key.
- **xfer** - Indicates the key is configured as a Transfer key for transferring calls.
- **icom** - Indicates the key is set to be used as the Intercom key.
- **phonelock** - Indicates the key is set to be used to lock/unlock the phone.
- **paging** - Indicates the key is set for Group Paging on the phone. Pressing this key automatically sends a Real Time Transport Protocol (RTP) stream to pre-configured multicast address(es) without involving SIP signaling.
- **hotdesklogin** - Indicates the key is configured to be used as a login key when utilizing the Visitor Desk Phone hotdesk feature.
- **discreetringing** - Indicates the key is configured to toggle Discreet Ringing on/off.

FORMAT	Text
DEFAULT VALUE	N/A

RANGE

- none
- line
- speeddial
- dnd
- blf (6865i only)
- list (6865i only)
- acd (6865i only)
- xml
- flash
- spre
- park
- pickup
- lcr
- callforward
- blxfxfer (6865i only)
- speeddialxfer
- speeddialconf
- speeddialmwi (6865i only)
- directory
- filter (6865i only)
- callers
- redial
- conf
- xfer
- icom
- services
- phonerlock
- paging
- hotdesklogin
- discretringing

EXAMPLE

hardkey1 type: speeddial

PARAMETER –
hardkeyN value

CONFIGURATION FILES

startup.cfg, <model>.cfg, <mac>.cfg

DESCRIPTION

The value you would like to assign to the hard key you are configuring. The “hardkeyN value” parameter can be set for the following key types only:

- speeddial
- line
- blf (6865i only)
- spre
- xml
- park
- pickup
- blxfxfer (6865i only)
- speeddialxfxfer
- speeddialconf
- speeddialmwi (6865i only)
- redial
- filter (6865i only)
- paging

Notes:

- For speeddial the value is the phone number, extension, or prefix number to enter for the key.
- For line the value is optional; for example L4.
- For blf the value is the extension you want to monitor.
- For spre the value is dependent on services offered by server.
- For xml you can specify a URI to use for this XML key. The variables you can use with the XML softkey URI are:
 - \$\$SIPUSERNAME\$\$
 - \$\$SIPAUTHNAME\$\$
 - \$\$PROXYURL\$\$
 - \$\$LINESTATE\$\$
 - \$\$LOCALIP\$\$
 - \$\$REMOTENUMBER\$\$
 - \$\$DISPLAYNAME\$\$
 - \$\$SIPUSERNAME\$\$
 - \$\$INCOMINGNAME\$\$
 - \$\$CALLDURATION\$\$
 - \$\$CALLDIRECTION\$

FORMAT

String

DEFAULT VALUE

N/A

RANGE

N/A

EXAMPLE

hardkey1 value: 123456+ (example of a speeddial prefix)

PARAMETER – <i>hardkeyN line</i>	CONFIGURATION FILES
	startup.cfg, <model>.cfg, <mac>.cfg
DESCRIPTION	<p>The line associated with the hard key you are configuring. The “hardkeyN line” parameter can be set for the following key types only:</p> <ul style="list-style-type: none"> • speeddial • blf (6865i only) • list (6865i only) • acd (6865i only) • park • pickup • lcr • blxfxfer (6865i only) • speeddialxfxfer • speeddialconf • speeddialmwi (6865i only) • redial • filter (6865i only)
FORMAT	Integer
DEFAULT VALUE	N (where N = line number)
RANGE	1-2 (6863i) 1-24 (6869i)
EXAMPLE	hardkey1 line: 9

PARAMETER – <i>hardkeyN locked</i>	CONFIGURATION FILES
	startup.cfg, <model>.cfg, <mac>.cfg
DESCRIPTION	<p>Locks the specified hard key on SIP phones. When enabled, the phone locks the key with the provisioned local settings and prevents users from changing or configuring the key.</p> <p>Note: If no settings are configured locally but the “hardkeyN type” is defined in a configuration file, the phone will lock the key with the key type defined in the configuration file along with any values associated with the additional “hardkeyN” parameters (i.e. “hardkeyN value” and “hardkeyN line”).</p>
FORMAT	Integer
DEFAULT VALUE	0 (Disabled)
RANGE	0 (Disabled) 1 (Enabled)
EXAMPLE	hardkey1 locked: 1

PARAMETER –
hardkeyN ring splash

CONFIGURATION FILES

startup.cfg, <model>.cfg, <mac>.cfg

DESCRIPTION

(6865i, 6867i, and 6869i only)

When a key is configured for BLF or BLF/List functionality, this parameter controls the ring splash alert pattern per key. The following alerting patterns are available:

- **0:** Silence (ring splash off).
- **1:** Normal (same as current BLF ring splash).
- **2:** Normal delayed (After a delay of [x] seconds, the ring signal that is the same as the current BLF ring splash is played [use the “ring splash delay” parameter to define the delay]).
- **3:** Periodic (similar to the normal ring signal that is used by the phone itself. The actual ring melody is based on the current melody set for the line to which the BLF or BLF/List key is associated [use the “ring splash frequency” parameter to define the frequency interval]).
- **4:** Periodic delayed (same as Periodic but after a delay of [x] seconds, the ring signal that is used by the phone is played [use the “ring splash frequency” parameter to define the frequency interval and the “ring splash delay” parameter to define the delay]).
- **5:** Low volume (same as the current BLF ring splash but at a lower level to be less intrusive).
- **6:** Low volume delayed (after a delay of [x] seconds, the ring signal that is the same as the current BLF ring splash is played at a lower level [use the “ring splash delay” parameter to define the delay]).
- **7:** The behavior is determined by the global parameter “play a ring splash”.
 - If “play a ring splash” is defined as 0 then the feature is disabled.
 - If “play a ring splash” is defined as 1 then the behavior is the same as Normal.
 - If “play a ring splash” is defined as 2 then the behavior is the same as Normal but the ring splash plays when idle and also during the active call state.
- **8:** In call delayed (same as Normal delayed but ring splash plays when idle and also during the active call state [use the “ring splash delay” parameter to define the delay]).
- **9:** In call periodic (same as Periodic but ring splash plays when idle and also during the active call state [use the “ring splash frequency” parameter to define the frequency interval]).
- **10:** In call periodic delayed (same as Periodic delayed but ring splash plays when idle and also during the active call state [use the “ring splash frequency” parameter to define the frequency interval and the “ring splash delay” parameter to define the delay]).

FORMAT

- **11:** In call low volume (same as Low volume but ring splash plays when idle and also during the active call state).
- **12:** In call low volume delayed (same as Low volume delayed but ring splash plays when idle and also during the active call state [use the “ring splash delay” parameter to define the delay]).

Notes:

- Ring tones are based on the current ring tone set configured on the IP phone.
- Ring splashes will not be played if a custom ring tone is selected.

DEFAULT VALUE

Integer

RANGE

N/A

EXAMPLE

- 0 (Silence)
- 1 (Normal)
- 2 (Normal delayed)
- 3 (Periodic)
- 4 (Periodic delayed)
- 5 (Low volume)
- 6 (Low volume delayed)
- 7 (The behavior is determined by the global parameter “play a ring splash”).
 - If “play a ring splash” is defined as 0 then the feature is disabled.
 - If “play a ring splash” is defined as 1 then the behavior is the same as Normal.
 - If “play a ring splash” is defined as 2 then the behavior is the same as Normal but the ring splash plays when idle and also during the active call state).
- 8 (In call delayed)
- 9 (In call periodic)
- 10 (In call periodic delayed)
- 11 (In call low volume)
- 12 (In call low volume delayed)

Example

hardkey1 ring splash: 1

SSL CERTIFICATE SUBJECT ALTERNATIVE NAME (SAN) SUPPORT

The 6800i Series SIP phones now support Subject Alternative Names (SANs) in Release 4.1.0 when validating SSL certificates. SANs allow Administrators to specify a list of hostnames that can be protected by a single SSL certificate.

When the "**https validate hostname**" ("**Check Hostnames**" option on the Web UI) is enabled, the names defined as SANs in a certificate are used for matching against the phone's configured server name. If no matches are found, the common name in the certificate is used.

Considerations

The following considerations should be noted:

- When matching the configured server name against names from the certificate SAN, both DNS names and IP address names from the SAN are selected. Other names such as the Service (SRV) record names are ignored.
- Multiple DNS names and IP address names from the certificate SAN are supported.
- If the phone's configured HTTPS server name is a DNS name, wildcard matching is supported. However, only the first label of the DNS name will be wildcard matched. The remaining labels of the DNS name are matched identically.
- The first label of a DNS name from a certificate SAN can be in the following format:

<LH>*<RH>.<Any Other Labels>.com

where LH and RH can be any valid string or empty and the asterisk (i.e. "*") is the wildcard character. For example, service providers can add DNS names like the following in the SAN of their certificates:

- *.example.com
 - *xyz.example.com
 - xyz*.example.com
 - abc*xyz.example.com
- If the phone's configured HTTPS server name is an IP address, it will be matched identically with the DNS names and IP address names from the certificate SAN.



Note: Refer to the *6800i Series SIP Phones Release 4.1.0 Administrator Guide* for more information on HTTPS certificate and hostname validation.

COMODO RSA, DIGICERT, GODADDY, MITEL MBG, AND TRUSTZONE SSL CERTIFICATE SUPPORT

With Release 4.1.0, the SIP phones now support the validation of Comodo RSA, DigiCert, GoDaddy, Mitel MiVoice Border Gateway (MBG), and TrustZone SSL certificates. The SIP phones come pre-loaded with root certificates from the following SSL certificate providers:

- Comodo (EssentialSSL and 4096-bit RSA)
- CyberTrust
- DigiCert
- Entrust
- GoDaddy
- GeoTrust
- Mitel MBG
- Thawte
- TrustZone
- Verisign



Note: Certificates that are signed by providers other than those listed above do not verify on the phone by default. Users can overcome this by adding the root certificate of their certificate provider to the user-provided certificate .PEM file. For more information about HTTPS validation and user-provided certificates, refer to the *Mitel 6800i Series SIP Phones Administrator Guide*.

CONFIGURABLE VISITOR DESK PHONE LOGIN/LOGOUT SECURITY BEHAVIOR

Using the **"hot desk high security"** parameter, Administrators are now able to define whether or not Visitor Desk Phone (VDP) users have to enter their credentials every time they want to log out of the phone. This same parameter will also define whether or not the user needs to re-enter their credentials on restarts of an already logged in phone.

When the **"hot desk high security"** parameter is defined as "0" (disabled) and a user is logged in to their VDP account, if a power loss occurs, upon recovery the phone will attempt to automatically log in using the last set of credentials recorded by the phone.



Note: The last user name and password used to log in to a VDP account is encrypted and stored on the phone.

Additionally, users can press the "Logout" key to immediately log out of their VDP account without the need to enter their password.

When the **"hot desk high security"** parameter is defined as "1" (enabled), no automatic login attempts are made by the phone even after a power loss. Users are required to enter their credentials to log in to their VDP account at all times. Additionally, users must enter their password to log out of their account. These security features ensure that accounts are only logged in to and logged out of when initiated by the respective user.



Notes:

1. The **"hot desk high security"** parameter is enabled by default.
2. Refer to the *6800i Series SIP Phones Release 4.1.0 Administrator Guide* for more information on the VDP feature.

Configuring VDP Login/Logout Security Behavior Using the Configuration Files

Use the following parameter to configure VDP login/logout security behavior using the configuration files:

PARAMETER	CONFIGURATION FILES
<i>hot desk high security</i>	startup.cfg, <model>.cfg, <mac>.cfg
DESCRIPTION	Enables or disables a higher security level on the phone when using the VDP feature. When enabled, the phone will require a password to log out and will require users to re-enter their login credentials when phone is restarted.
FORMAT	Integer
DEFAULT VALUE	1 (Enabled)
RANGE	0-1 0 (Disabled) 1 (Enabled)
EXAMPLES	hot desk high security: 0

G.722.1 AUDIO CODEC SUPPORT

The 6800i Series SIP phones now support the G.722.1 audio codec. The ITU-T *Recommendation G.722.1* describes G.722.1 as a codec used for "low complexity coding at 24 and 32 kbit/s for hands-free operation in systems with low frame loss".

Administrators can configure the G.722.1 audio codec on the SIP phones by defining the "**sip customized codec**" parameter in the configuration files or by using the **Customized Codec Preference List** on the Web UI.



Note: The SIP phone uses payload 121 for the G.722.1 audio codec.

If the customized codec preference list is configured as "All", the phone will set the codec order of preference as per the following table:

PREFERENCE	PAYLOAD	CODEC
1	0	G711u/8000
2	18	G729/8000
3	113	L16/16000
4	110	G711u/16000
5	111	G711a/16000
6	112	L16/8000
7	98	G726-16/8000
8	97	G726-24/8000
9	115	G726-32/8000
10	96	G726-40/8000
11	9	G722/8000
12	8	G711a/8000
13	118	AMR (Licensed feature)
14	119	AMR-WB (G.722.2 - Licensed feature)
15	121	G.722.1

Configuring Audio Codecs Using the Configuration Files

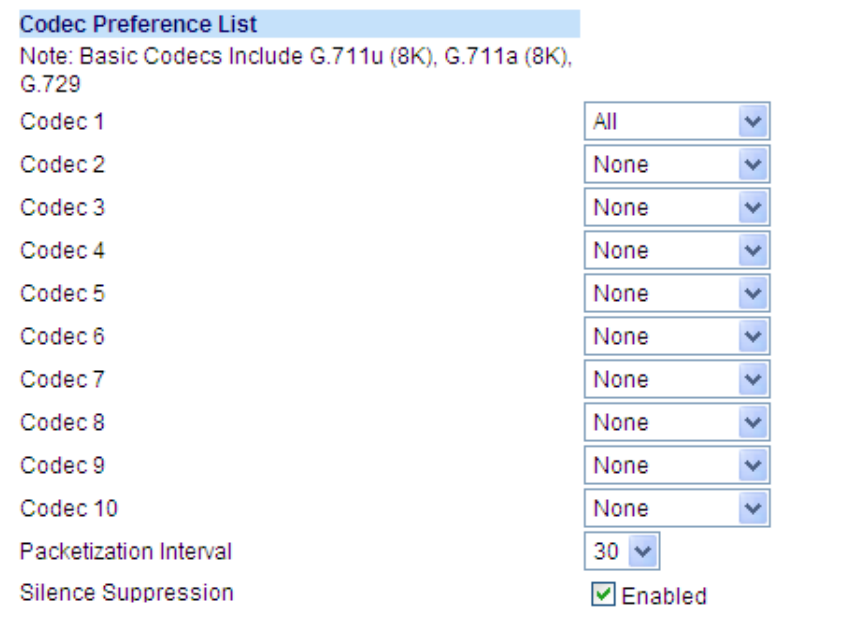
Use the following parameter to configure audio codecs for the SIP phone:

PARAMETER – <i>sip customized codec</i>	CONFIGURATION FILES
	startup.cfg, <model>.cfg, <mac>.cfg
DESCRIPTION	Specifies a customized codec preference list which allows you to select the preferred codecs for this SIP phone. You can enter up to 10 codec preferences.
FORMAT	Comma-separated list of semicolon-separated values
DEFAULT VALUE	N/A
RANGE	Valid values for the syntax are: payload (number only): 0 - G711u/8000 8 - G711a/8000 9 - G722/8000 18 - G729/8000 96 - G726-40/8000 97 - G726-24/8000 98 - G726-16/8000 110 - G711u/16000 111 - G711a/16000 112 - L16/8000 113 - L16/16000 115 - G726-32/8000 118 - AMR (Licensed feature) 119 - AMR-WB (G.722.2 - Licensed feature) 121 - G.722.1 Note: Leave blank for all codecs ptime (in milliseconds) 5, 10, 15, 20.....90 silsupp "on" or "off" Note: Enabling or disabling silence suppression (sil sup) enables/disables it for all codecs in the customized list. When a mismatch occurs in the configured silsupp parameter, the first one specified in the parameter value will be used.
EXAMPLE	<code>sip customized codec: payload=18;ptime=10;silsupp=on,payload=0;ptime=10;silsupp=on</code>

Configuring the Audio Codecs Using the Web UI

Use the following procedure to configure the audio codecs using the Web UI:

1. Click on **Advanced Settings > Global SIP**.



2. In the **Codec Preference List**, select the desired codec. Valid values are:

- All
- Basic (G.711 u-law, G.711 a-law, G.729)
- G.722
- G.711u (8K)
- G.711u (16K)
- G.711a (8K)
- G.711a (16K)
- G.729
- G.726-16
- G.726-24
- G.726-32
- G.726-40
- L16 (8K)
- L16 (16K)
- AMR (Licensed feature)
- AMR-WB (G.722.2) (Licensed feature)
- G.722.1

**Notes:**

1. Setting Codec 1 to “All” ignores the packetization interval (ptime). The packetization interval setting defaults to 30, which is the default for all codecs.
 2. Setting Codec 1 to “All” automatically sets all other codec preference fields 2 through 10 to “None”.
 3. Setting Codec 1 to “Basic” and all other codec preferences in 2 through 10 to “None”, forces the phone to use only the basic codecs (G.711 u-law, G.711 a-law, and G.729). If you select an additional codec to use in the codec preferences 2 through 10 fields, those codecs are added to the list of Basic codecs for the phone to use.
3. (Optional) In Codec 2 through Codec 10, select a preference of codecs to use on the phone. Valid values are:
- None
 - G.722
 - G.711u (8K)
 - G.711u (16K)
 - G.711a (8K)
 - G.711a (16K)
 - G.729
 - G.726-16
 - G.726-24
 - G.726-32
 - G.726-40
 - L16 (8K)
 - L16 (16K)
 - AMR (Licensed feature)
 - AMR-WB (G.722.2) (Licensed feature)
 - G.722.1



Note: You can select up to 9 codecs in addition to the codec you selected in step 2.

4. In the “**Packetization Interval**” field, select the time, in milliseconds. Valid values are 5 to 90, in increments of 5 milliseconds.
5. The “**Silence Suppression**” field is enabled by default. Disable this field by unchecking the check box. When enabled, the phone negotiates whether or not to use silence suppression. Disabling this feature forces the phone to ignore any negotiated value.
6. Click **Save Settings** to save your changes.

SIP FEATURES

MULTIPLE VOICEMAIL REGISTRATION

Multiple voicemail registration is now supported on the 6865i, 6867i, and 6869i SIP phones in Release 4.1.0. This feature can be useful in scenarios where a user needs to monitor the voicemail accounts of his/her team members or an assistant requires access to his/her manager's voicemail messages.

By configuring a programmable key, top softkey, or expansion module softkey as "Speeddial/MWI" and defining call and voicemail URIs, users can monitor and listen to pending messages on multiple voicemail accounts. When new messages are pending on a monitored voicemail account the corresponding Speeddial/MWI key's LED will blink (6865i, 6867i, and 6869i) and the UI (for top softkeys on the 6867i and 6869i) will display a voicemail icon and the number of pending messages beside the defined label.

6867i Speeddial/MWI Key Example



6869i Speeddial/MWI Key Example



When a user presses the Speeddial/MWI key, the phone will send an INVITE to the configured call URI whereby the user will be able to listen to the new messages.

Users can configure the Speeddial/MWI key through the Mitel Web UI while Administrators can configure the key through the Mitel Web UI as well as the configuration files.

Configuring a Speeddial/MWI Key Using the Mitel Web UI

Use the following procedure to configure a Speeddial/MWI key using the Mitel Web UI:

1. Click on **Operation > Programmable Keys**
or
Click on **Operation > Softkeys and XML > Top Keys**
or
Click on **Operation > Expansion Module <N>**

Softkeys Configuration

Bottom Keys | **Top Keys**

Key	Type	Label	Value	Line
1	Speeddial/MWI	Peter	+33123456,,,3456#00	global
2	None			global
3	None			global
4	None			global
5	None			global

2. Choose an available key and in the **Type** field, select **Speeddial/MWI**.
3. (If applicable) In the **Label** field, enter a label to apply to this key. When messages are pending, the phone UI will display a voicemail icon, the number of pending messages, and the defined label.
4. In the **Value** field, enter call URI and voicemail URI separated by a semi-colon, as per the following syntax: [call URI];[voicemail URI]. For example, +33123456,,,3456#0000#@domain;sip:voicemail_peter@domain.



Notes:

1. As the example above illustrates, pauses and DTMF are supported for the call URI.
 2. Ensure that no spaces are added between the call URI and the voicemail URI when defining the key value.
 3. If only one URI is provided, the value will be used for the voicemail URI and the call URI will be left as undefined.
5. In the **Line** field, select the line for which you want to use the key functionality.
 6. Click **Save Settings**.

Configuring a Speeddial/MWI Key Using the Configuration Files

To configure a Speeddial/MWI key using the configuration files, you must enter "speeddialmwi" for the key type. For the label (6867i/6869i/M685i only), enter a key label to assign to the Speeddial/MWI key (e.g. Peter). For the value, enter call URI and voicemail URI separated by a semi-colon, as per the following syntax: [call URI];[voicemail URI]. For example, +33123456,,3456#0000#@domain;sip:voicemail_peter@domain.



Notes:

1. As the example above illustrates, pauses and DTMF are supported for the call URI.
2. Ensure that no spaces are added between the call URI and the voicemail URI when defining the key value.
3. If only one URI is provided, the value will be used for the voicemail URI and the call URI will be left as undefined.

For the line, enter the line for which you want to use the key functionality (e.g. 3). The following parameters are examples you can use to configure a Speeddial/MWI key using the configuration files:

For Top Softkeys

```
topsoftkey1 type: speeddialmwi
topsoftkey1 label: Peter
topsoftkey1 value:
+33123456,,3456#0000#@domain;sip:voicemail_peter@domain
topsoftkey1 line: 3
```

For Programmable Keys

```
prgkey1 type: speeddialmwi
prgkey1 value:
+33123456,,3456#0000#@domain;sip:voicemail_peter@domain
prgkey1 line: 3
```

For Expansion Module Softkeys

```
expmod1 key1 type: speeddialmwi
expmod1 key1 label: Peter
expmod1 key1 value:
+33123456,,3456#0000#@domain;sip:voicemail_peter@domain
expmod1 key1 line: 3
```

For Hard Keys

```
hardkey1 type: speeddialmwi
hardkey1 value:
+33123456,,3456#0000#@domain;sip:voicemail_peter@domain
hardkey1 line: 3
```



Note: Refer to the *6800i Series SIP Phones Release 4.1.0 Administrator Guide* for more information on how to configure softkeys, programmable keys, expansion module keys, and hard keys using the configuration files.

TCPDUMP NETWORK PACKET CAPTURE SUPPORT

Tcpdump network packet capture functionality is now natively available on the phones in Release 4.1.0. By navigating to the Advanced Settings > Capture page on the phone's Web UI, Administrators can configure/perform the following:

- **Port:** The port, ports, or range of ports from where the phone should capture traffic.
- **Timeout:** The amount of time (in hours) the capture should extend until. The range is from 1 to 168 (7 days) and the default is 24 (1 day). The capture will automatically stop when the timeout is met.
- **Get capture file:** Allows you to save the capture file to the desired directory.
- **Start/Stop:** Allows you to start/stop the tcpdump capture.



Notes:

1. Tcpdump capture functionality in Release 4.1.0 supports phone side capture and storage for troubleshooting issues that are of a consistent and reproducible nature. For larger or long duration capture, Administrators are recommended to capture on the network side using a hub or switch with port mirroring.
2. If attempting to capture packet data relating to an issue, Mitel recommends Administrators perform multiple captures of the issue (if possible) to ensure the respective packet data is collected.
3. The type of packets captured (TCP or UDP) is dependent on the transport protocol configured on the phone.

Configuring/Enabling Tcpdump Capture Functionality Using the Mitel Web UI

Use the following procedure to configure/enable Tcpdump capture functionality using the Web UI:

1. Click on **Advanced Settings > Capture**.

Capture	
Settings	
Port	<input type="text" value="5060"/>
Timeout	<input type="text" value="24"/>
Get capture file	<input type="button" value="Save As..."/>
Start	<input type="button" value="Start"/>
<input type="button" value="Save Settings"/>	

2. In the **Port** field, enter the port or ports from where the phone should capture traffic (e.g. 5000:6000;7000).



Notes:

1. The default is 5060.
2. Use a colon (i.e. ":") or hyphen (i.e. "-") to set a range. For example, 5000:6000 or 5000-6000 will capture traffic from ports 5000 through to 6000.
3. Use a semi-colon (i.e. ";") to add individual ports. For example, 5000;6000;7000 will capture traffic from ports 5000, 6000, and 7000.
4. Ranges and individual ports can be combined. For example, 5000:7000;8000 will capture traffic from ports 5000 through to 7000 as well as capture traffic from port 8000.
5. Packets on port 23 (Telnet) will not be captured.

3. In the **Timeout** field, enter the amount of time (in hours) the capture should extend until (e.g. 48).



Notes:

1. The default is 24 hours.
2. The range is from 1 hour to 168 hours (7 days).

4. Click **Save Settings**.
5. Click on **Advanced Settings > Capture**.
6. Click **Start** to begin the capture.



Note: At any time, navigate back to **Advanced Settings > Capture** and click **Stop** to end the capture manually. Otherwise, the capture will end automatically when the timeout has been reached.

7. When the capture has ended, navigate back to **Advanced Settings > Capture** and click the Get capture file -- **Save As...** button to save the tcpdump.pcap file.

MICLOUD TELEPO MUSIC ON HOLD SUPPORT

MiCloud Telepo "music on hold" functionality is now supported on the 6800i Series SIP phones in Release 4.1.0. "Music on hold" is a feature whereby calls placed on hold are provided with an audio stream (often music) that is played back to the held party for the duration of the hold.



Notes:

1. The feature is applicable to the 6800i Series SIP phones when used in conjunction with the MiCloud Telepo for Service Providers call manager.
2. This feature has been implemented on the phones using the basic techniques detailed in RFC 7088, "Session Initiation Protocol Service Example -- Music on Hold".

Administrators can use the global "**sip moh server**" parameter or per line "**sip lineN moh server**" parameters to enable the music on hold feature. If a media server SIP address (excluding the domain name) is defined using the parameter, the phone will use the specified server to provide an audio stream to any held parties. The audio stream will be offered in all cases when a remote party is placed on hold (i.e. when placed on hold directly, when placed on hold while performing a transfer or conference, or when the local party switches lines).

Enabling Music on Hold Functionality

Use the following parameters to enable music on hold functionality (either globally or on a per-line basis):

PARAMETER	CONFIGURATION FILES
<i>sip moh server</i>	startup.cfg, <model>.cfg, <mac>.cfg
DESCRIPTION	(Global parameter) Specifies the media server SIP address providing the audio stream for music on hold functionality. If defined, the phone will use the specified server to provide an audio stream to any held parties globally. The audio stream will be offered in all cases when a remote party is placed on hold (i.e. when placed on hold directly, when placed on hold while performing a transfer or conference, or when the local party switches lines).
FORMAT	String (SIP address excluding the domain name)
DEFAULT VALUE	Empty
RANGE	N/A
EXAMPLES	sip moh server: musiconhold

PARAMETER	CONFIGURATION FILES
<i>sip lineN moh server</i>	startup.cfg, <model>.cfg, <mac>.cfg

(where N = line number)

DESCRIPTION	(Per-line parameter) Specifies the media server SIP address providing the audio stream for music on hold functionality. If defined, the phone will use the specified server to provide an audio stream to any held parties on the specific line. The audio stream will be offered in all cases when a remote party is placed on hold (i.e. when placed on hold directly, when placed on hold while performing a transfer or conference, or when the local party switches lines).
FORMAT	String (SIP address excluding the domain name)
DEFAULT VALUE	Empty
RANGE	N/A
EXAMPLES	sip line2 moh server: musiconhold

MICLOUD TELEPO CALL PARK/PICKUP SUPPORT

With Release 4.1.0, the phones are now interoperable with the call park/pickup method used by the MiCloud Telepo for Service Providers call manager.

Two keys configured with BLF/Xfer functionality (one defined as "myCalls" and the other as "callPark") facilitates this call park/pickup method. When the first BLF/Xfer key (defined as "myCalls") is pressed, the phone will subscribe to the myCalls@<domain>.com URI and users will be able to pick up any authorized calls. Pressing the second BLF/Xfer key (defined as "callPark") will transfer the active call to the callPark@<domain>.com URI (i.e. the park device).



Note: Interoperability has been implemented based on the call park/pickup principles outlined in RFC 3891 and RFC 4235.

Configuring a BLF/Xfer Key with Call Park/Pickup Functionality Using the Mitel Web UI

Use the following procedure to configure a BLF/Xfer key will call park/pickup functionality using the Mitel Web UI:

1. Click on **Operation > Programmable Keys**
or
Click on **Operation > Softkeys and XML > Top Keys**
or
Click on **Operation > Expansion Module <N>**

Softkeys Configuration

Key	Type	Label	Value	Line
1	BLF/Xfer	Pickup	myCalls	global
2	BLF/Xfer	Park	callPark	global
3	None			global
4	None			global
5	None			global

2. Choose an available key that you want to use as a pickup key and in the **Type** field, select **BLF/Xfer**.
3. (If available) In the **Label** field, enter a label to apply to this key (e.g. Pickup).
4. In the **Value** field, enter "myCalls".
5. Choose an available key that you want to use as park key and in the **Type** field, select **BLF/Xfer**.
6. (If available) In the **Label** field, enter a label to apply to this key (e.g. Park).
7. In the **Value** field, enter "callPark".
8. Click **Save Settings**.

Configuring a BLF/Xfer Key with Call Park/Retrieve Functionality Using the Configuration Files

To configure a BLF/Xfer key with call park/pickup functionality using the configuration files, two keys are required and you must enter "**blfxfer**" for the key types. For the labels (6867i/6869i/M685i only), enter key labels to assign to the pickup or park key (e.g. "Retrieve" and "Park"). For the values, enter "myCalls" for the pickup key and "callPark" for the park key.

The following parameters are examples you can use to configure a BLF/Xfer key using the configuration files:

For Top Softkeys

```
topsoftkey1 type: blfxfer
topsoftkey1 label: Retrieve
topsoftkey1 value: myCalls

topsoftkey2 type: blfxfer
topsoftkey2 label: Park
topsoftkey2 value: callPark
```

For Programmable Keys

```
prgkey1 type: blfxfer
prgkey1 value: myCalls

prgkey2 type: blfxfer
prgkey2 value: callPark
```

For Expansion Module Softkeys

```
expmod1 key1 type: blfxfer
expmod1 key1 label: Retrieve
expmod1 key1 value: myCalls

expmod2 key1 type: blfxfer
expmod2 key1 label: Park
expmod2 key1 value: callPark
```

For Hard Keys

```
hardkey1 type: blfxfer
hardkey1 value: myCalls

hardkey2 type: blfxfer
hardkey2 value: callPark
```



Note: Refer to the *6800i Series SIP Phones Release 4.1.0 Administrator Guide* for more information on how to configure softkeys, programmable keys, expansion module keys, and hard keys using the configuration files.

MICLOUD TELEPO DIRECTED CALL PICKUP SUPPORT

Improvements have been made in Release 4.1.0 with regards to the directed call pickup feature specifically for interoperability with the MiCloud Telepo for Service Providers call manager.

For MiCloud Telepo interoperability, the directed call pickup feature must be enabled (i.e. the **"directed call pickup"** parameter must be defined as **"1"**) and the **"enhanced directed call pickup"** parameter must be defined as **"3"**.

In this enhanced directed call pickup mode, pressing a BLF key when the monitored extension is ringing will cause the phone to use the dialog information sent in the NOTIFY message to form the INVITE request (the dialog information will be detailed in the "Replaces" header of the INVITE).

Enabling MiCloud Telepo Directed Call Pickup Support Using the Configuration Files

Use the following parameters to enable MiCloud Telepo directed call pickup support using the configuration files:

PARAMETER – <i>directed call pickup</i>	CONFIGURATION FILES
	startup.cfg, <model>.cfg, <mac>.cfg
DESCRIPTION	Enables or disables the use of "directed call pickup" feature.
FORMAT	Boolean
DEFAULT VALUE	0 (Disabled)
RANGE	0 (Disabled) 1 (Enabled)
EXAMPLE	directed call pickup: 1

PARAMETER – <i>enhanced directed call pickup</i>	CONFIGURATION FILES
	startup.cfg, <model>.cfg, <mac>.cfg
DESCRIPTION	Enables the enhanced BLF directed call pickup feature. When using the MiCloud Telepo platform, the parameter must be defined as "3". In this mode, pressing a BLF key when the monitored extension is ringing will cause the phone use the dialog information sent in the NOTIFY message to form the INVITE request (the dialog information will be detailed in the "Replaces" header of the INVITE). Note: Applicable to the 6865i, 6867i, and 6869i IP phones only.
FORMAT	Integer
DEFAULT VALUE	0 (Disabled)
RANGE	0 - 3 0 (Disabled) 1 (Two-stage BLF) 2 (Reserved) 3 (Directed call pickup for MiCloud Telepo only)
EXAMPLE	enhanced directed call pickup: 3

UI FEATURES

GREEK SCREEN AND INPUT LANGUAGE SUPPORT

The Greek language is now supported on the 6867i and 6869i SIP phones. Users can change their screen language to view all SIP phone UI and Web UI text in Greek as well as change their phone's input language allowing them to input Greek characters using the dialpad on the phone.

The characters that can be entered using the dialpad when the input language has been changed to Greek is as follows:



KEY	UPPERCASE CHARACTERS	LOWERCASE CHARACTERS
0	0+	0+
1	1.;=,_'&()\$!	1.;=,_'&()\$!
2	ABC2ABΓ	abc2αβγ
3	DEF3ΔEZ	def3δεζ
4	GHI4HΘI	ghi4ηθι
5	JKL5KΛM	jkl5κλμ
6	MNO6NΞO	mno6νξο
7	PQRS7ΠΡΣ	pqr7πρςσ
8	TUV8TYΦ	tuv8τυφ
9	WXYZ9XΨΩ	wxyz9χψω
*	* <SPACE>	* <SPACE>
#	#\#@	#\#@

Users can:

- Configure the screen language using the SIP phone UI.
- Configure the input language using the SIP phone UI or Mitel Web UI.
- Configure the Web UI language using the Mitel Web UI.

Administrators can perform all of the above as well as configure any language settings using the configuration files.

Configuring the Phone's Screen Language Using the SIP Phone UI



1. Press  on the phone to enter the Options List.
2. Navigate to the **Language** option and press the  button or **Select** softkey.
3. With **Screen Language** highlighted press the ► key to move to selection column.
4. Use the ▲ and ▼ keys to scroll through and choose the desired screen language.



Note: All languages may not be available for selection. The available languages are dependent on the language packs currently loaded to the IP phone. English is the default language and cannot be changed or removed.

5. Press the **Save** softkey to save your changes.

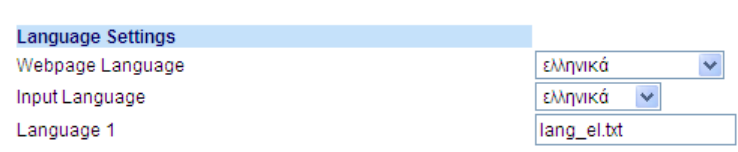
Configuring the Phone's Input Language Using the SIP Phone UI

1. Press  on the phone to enter the Options List.
2. Navigate to the **Language** option and press the  button or **Select** softkey.
3. Press the ▼ key to highlight the **Input Language** option.
4. With **Input Language** highlighted press the ► key to move to selection column. Use the ▲ and ▼ keys to scroll through and choose the desired input language.
5. Press the **Save** softkey to save your changes.

Configuring the Web UI Language and Input Language Using the Mitel Web UI

Use the following procedure to configure the Web UI language and input language using the Web UI:

1. Click on **Basic Settings > Preferences > Language Settings**.



2. In the **Webpage Language** field, select a language to apply to the Mitel Web UI.



Note: All languages may not be available for selection. The available languages are dependent on the language packs currently loaded to the IP phone. English is the default language and cannot be changed or removed.

3. In the **Input Language** field, select the desired input language.
4. Click **Save Settings**.

Configuring the Phone's Language Settings Using the Configuration Files

Use the following parameters to configure the phone's screen language, Web UI language, input language, and language pack settings using the configuration files:

PARAMETER – <i>language</i>	CONFIGURATION FILES startup.cfg, <model>.cfg, <mac>.cfg
DESCRIPTION	The language you want to display for the IP Phone UI. Valid values for all phones are: <ul style="list-style-type: none"> • 0 (English) default • 1-4 The values 1-4 are dependent on the “ Language N ” parameter. For example, if “language 1: lang_el.txt”, then “language: 1” would set the SIP phone UI language to Greek. Note: All languages may not be available for selection. The available languages are dependent on the language packs currently loaded to the SIP phone.
FORMAT	Integer
DEFAULT VALUE	0
RANGE	0 to 4
EXAMPLE	language: 1

PARAMETER – <i>web language</i>	CONFIGURATION FILES startup.cfg, <model>.cfg, <mac>.cfg
DESCRIPTION	The language you want to display for the Mitel Web UI. Valid values for all phones are: <ul style="list-style-type: none"> • 0 (English) default • 1-4 The values 1-4 are dependent on the “ Language N ” parameter. For example, if “language 1: lang_el.txt”, then “language: 1” would set the webpage language to Greek. Note: All languages may not be available for selection. The available languages are dependent on the language packs currently loaded to the SIP phone.
FORMAT	Integer
DEFAULT VALUE	0
RANGE	0 to 4
EXAMPLE	web language: 1

PARAMETER –
input language

CONFIGURATION FILES

startup.cfg, <model>.cfg, <mac>.cfg

DESCRIPTION

Allows you to specify the language to use for inputs on the IP Phone. Entering a language value for this parameter allows users to enter text and characters in the SIP phone UI, Mitel Web UI, and in XML applications via the keypad on the phone, in the language(s) specified.

FORMAT

Text

DEFAULT VALUE

English

RANGE

Valid values are:

- English
- French
- Français
- German
- Deutsch
- Greek
- ελληνικά
- Italian
- Italiano
- Spanish
- Español
- Portuguese
- Português
- Russian
- Русский
- Nordic

EXAMPLE

input language: Greek

PARAMETER –

language N

Where “N” can be 1, 2, 3, or 4

CONFIGURATION FILES

startup.cfg, <model>.cfg, <mac>.cfg

DESCRIPTION

The language pack you want to load to the SIP phone. Valid values are:

- lang_cs.txt (Czech - UTF-8)
- lang_cs_op.txt (Czech - ASCII)
- lang_ct.txt (Catalan)
- lang_ct_va.txt (Valencian)
- lang_cy.txt (Welsh)
- lang_de.txt (German)
- lang_da.txt (Danish)
- lang_el.txt (Greek)
- lang_es.txt (Spanish)
- lang_es_mx.txt (Mexican Spanish)
- lang_eu.txt (Euskera)
- lang_fi.txt (Finnish)
- lang_fr.txt (French)
- lang_fr_ca.txt (Canadian French)
- lang_gl.txt (Galego)
- lang_hu.txt (Hungarian)
- lang_it.txt (Italian)
- lang_nl.txt (Dutch)
- lang_nl_nl.txt (Dutch - Netherlands)
- lang_no.txt (Norwegian)
- lang_pl.txt (Polish - ASCII)
- lang_pl_pl.txt (Polish - UTF-8)
- lang_pt.txt (Portuguese)
- lang_pt_br.txt (Brazilian Portuguese)
- lang_ro.txt (Romanian)
- lang_ru.txt (Russian)
- lang_sk.txt (Slovak - UTF-8)
- lang_sk_op.txt (Slovak - ASCII)
- lang_sv.txt (Swedish)
- lang_tr.txt (Turkish)

You can use this parameter in three ways:

- To download no language packs
- To download a language pack(s) from the original configuration server
- To download a language pack(s) from another specified server

Notes:

- The languages packs you load are dependent on available language packs from the configuration server.
- You must reboot the phone to load a language pack.
- To download a specific file, the string value MUST HAVE A FILENAME at the end of the string. For example:
 language 1:ftp://admin:admin!@1.2.3.4:50/path/lang_el.txt
 where “path” is the directory and “lang_el.txt” is the filename. If you do not specify a filename, the download fails.

See examples for each below.

FORMAT	lang_<ISO 639>_<ISO 3166>.txt or lang_<ISO 639>.txt
DEFAULT VALUE	N/A
RANGE	N/A
EXAMPLE	<p>The following example downloads no language pack file:</p> <ul style="list-style-type: none"> • language 1: <p>The following example downloads the Greek language pack to the phones from the original configuration server:</p> <ul style="list-style-type: none"> • language 1: lang_el.txt <p>The following example uses FTP to download the firmware file “lang_de.txt” (Greek language pack) from the “path” directory on server 1.2.3.4 using port 50:</p> <ul style="list-style-type: none"> • language 1:ftp://admin:admin!@1.2.3.4:50/path/lang_el.txt

K680i LIVE KEYBOARD SUPPORT FOR XML APPLICATIONS

The Live Keyboard feature was introduced in Release 4.0.0 SP1, which, when enabled, would wake up the phone and automatically launch the Directory search function if an alphabetic character key on an attached K680i keyboard was pressed on the home/idle screen.

In Release 4.1.0, the Live Keyboard feature can now be used in conjunction with XML applications (e.g. XML-based directories). By enabling the Live Keyboard feature and by defining the "**keyboard script**" parameter with the respective URI in the configuration files, pressing an alphabetic character key on an attached K680i keyboard on the home/idle screen will launch the XML application and pass the character to the XML application first input field (if available).



Notes:

1. The "**keyboard script**" setting can only be defined using the configuration files.
2. If the "**keyboard script**" parameter is not defined, the phone will attempt to pass the pressed key to the XML application defined in the "**directory script**" parameter. If the "**directory script**" parameter is not defined as well, the phone's native Directory search function will be launched. Refer to the *6800i Series SIP Phones Release 4.1.0 Administrator Guide* for more information on the "**directory script**" parameter.
3. Irrespective of whether the Live Keyboard feature is enabled or disabled, pressing a numerical key on the K680i keyboard when on the idle/home screen will result in the phone initiating the dialing function.



Users can enable/disable the Live Keyboard feature using the phone's native UI setting located in the Options List under *Directory > Settings > Live Keyboard*. Administrators have the added option of enabling/disabling the Live Keyboard feature by defining the "**live keyboard**" parameter as "1" (enabled) or "0" (disabled) in the respective configuration file.



Note: The Live Keyboard feature is disabled by default.

Configuring the Live Keyboard Feature Using the Phone's UI

Use the following procedure on the phone's UI to configure the Live Keyboard feature.

1. Press  on the phone to enter the Options List.
2. Navigate to the **Directory > Settings** option and press the  button or **Select** softkey.
3. Use the ▼ key to scroll down and highlight the Live Keyboard setting.



Note: The Live Keyboard setting is only available in this menu if a K680i keyboard is attached to the phone.

4. Press ► to move to the selection column.
5. Use ▲ the ▼ keys to enable (On) or disable (Off) the feature.
6. Press the **Save** softkey to save your changes.

Configuring the Live Keyboard Feature and Keyboard Script Using the Configuration Files

Use the following parameters to configure the Live Keyboard feature and keyboard script using the configuration files:

PARAMETER	CONFIGURATION FILES
<i>live keyboard</i>	startup.cfg, <model>.cfg, <mac>.cfg
DESCRIPTION	Specifies whether or not an alphabetic character key press on a K680i keyboard attached to an idle 6867i or 6869i SIP phone should launch the Directory search function.
FORMAT	Boolean
DEFAULT VALUE	0 (Disabled)
RANGE	0 - 1 0 (Disabled) 1 (Enabled)
EXAMPLE	live keyboard: 1
PARAMETER	CONFIGURATION FILES
<i>keyboard script</i>	startup.cfg, <model>.cfg, <mac>.cfg
DESCRIPTION	Specifies the URI to be called when an alphabetic key on a K680i keyboard attached to a 6867i or 6869i SIP phone is pressed. If this parameter is not defined or left blank, the phone's native Directory search function will be launched. Note: The Live Keyboard feature must be enabled to use this feature.
FORMAT	Alphanumeric characters
DEFAULT VALUE	N/A
RANGE	N/A
EXAMPLE	keyboard script: http://192.168.0.20/keyboardscript.xml

ISSUES RESOLVED IN RELEASE 4.1.0

This section describes the issues resolved on the SIP phones in Release 4.1.0.

The following table provides the issue number and a brief description of each fix:



Note: Unless specifically indicated, the resolved issues below apply to the all the 6800i SIP phones.

ISSUE NUMBER	DESCRIPTION OF FIX
Configuration	
ENH39408	A behavioral enhancement has been implemented in Release 4.1.0 whereby the phone will display a "New IP obtained" message on screen and automatically reboot to accommodate a dynamic IP change in certain scenarios where the DHCP server denies an IP renewal and offers a new IP address.
ENH39498/CLN39519	Factory default is now available as an option when the simplified options menu is enabled (i.e. under Phone Status for the 6863i/6865i and under Advanced > Reset for the 6867i/6869i).
DEF31921/CLN39212	An issue was observed whereby users were able to modify locked Call Forward settings through the phone's native UI. This issue has been fixed.
DEF38862	The "pin suppression dial plan" feature was not functioning as expected. This issue has been corrected and now when the pin suppression dial plan matches, the phone masks the PIN/authorization code on the display accordingly.
DEF39104/CLN39251	6865i, 6867i, and 6869i: With the "blf key mode" parameter enabled, users were unable to dial out to a BLF-monitored phone using a BLF key if the BLF-monitored phone was in a ringing or busy state. This issue has been resolved.
DEF39184/CLN39264/ CLN39300	With the HTTP Digest Login feature enabled, users were unable to login using the default username and password when presented with the HTTP digest login screen. This issue has been corrected.
DEF39237	6865i, 6867i, and 6869i: Users were unable to select from the complete list of ring tones when configuring ring tones for BLF/List keys. This issue has been resolved.
DEF39238	The time zone definition for AR-Buenos Aires was updated in Release 4.1.0 to reflect the current definition.
DEF39302	When defining the location of directory CSV files using partial URLs, if a default server path was configured, the phone would look for the directory CSV files in the wrong location (as it would incorrectly append the partial URL to the default server path). This issue has been corrected.
DEF39399	An issue was observed whereby certificates stored on the phone's flash were not being read in certain scenarios. This issue has been fixed.
DEF39473	Due to an access issue with the TR-069 private key, TR-069 configuration was not functioning as expected when attempting to communicate using the HTTPS protocol. This issue has been resolved.

ISSUE NUMBER	DESCRIPTION OF FIX
DEF39836	6867i and 6869i: When branding the phone using the Redirection and Configuration Service (RCS), the splash screen image was not being updated due to an issue with the "Color Splash File (png)" option field on the RCS server. This issue has been corrected.
DEF40286	With Release 4.1.0, the language file names for Catalan and Valencian have been changed to "lang_ca.txt" and "lang_ca_va.txt" respectively.
DEF40299	6863i: Users were unable to configure a programmable key with the "Login" key type. This issue has been resolved and users are now able to configure a "Login" key using the Web UI or by defining a prgkey as "hotdesklogin" in the configuration files.
SIP	
ENH39985	The phone now serializes the sending of REFER event NOTIFY messages in Release 4.1.0. This enhancement was implemented to ensure responses to sipfrag/NOTIFY messages were handled appropriately by the phone after accepting a REFER.
DEF39100	When using the phones with the MiCloud Telepo solution, registration issues could be observed on the phones if the "sip outbound support" configuration parameter was enabled and the transport protocol was set to TCP. These issues have been fixed.
DEF39279	An issue was observed whereby HTTP digest authentication was not functioning as expected for the directory upload process. This issue has been corrected.
DEF39569	6863i: An issue was observed whereby incoming calls to the phone would at times be provided with a 486 Busy Here response when the phone was in an idle state. This issue has been resolved.
DEF39680	When using the phones with the MiVoice MX-ONE call manager and in an active call, an issue was observed whereby the call would be terminated after approximately one minute if the remote party placed the call on hold. This issue has been fixed.
DEF39706	When using the phone with the Metaswitch call manager, if a number was dialed and then immediately cancelled using a line configured with SCA functionality, the phone would at times continue to request a line-seize. This issue has been resolved.
DEF39762	When making a call to a source that did not support RTP Control Protocol Extended Reports (RTCP-XR), the Round Trip Delay (RTD) metric provided in the SIP PUBLISH to the RTCP summary report collector was found to be inaccurate. This issue has been corrected.
DEF39842	When using the phones with a specific call manager and attempting to transfer a call, if the transfer attempt failed, retrieving the original call was not working as expected. This issue has been resolved.
DEF39873	6867i: With the "display dtmf digits" and "sip out-of-band dtmf" parameters enabled if, during an active call, the user dialed digits very quickly with some digits overlapping, all the digits would display on screen correctly, but some overlapping digits were not sent out in the RTP stream. This issue has been corrected.
DEF40118	Intermittent stability issues were observed on the phones when receiving IPv4 traffic on mixed IPv4/IPv6 customer networks. These issues have been fixed.

ISSUE NUMBER	DESCRIPTION OF FIX
User Interface	
ENH38306	6867i, 6869i, and M685i Expansion Module: The brightness levels of the LCD screen on the M685i Expansion Module have been made consistent with the brightness levels of the LCD screen on the phones in Release 4.1.0.
ENH39248	6867i and 6869i: When bottom softkeys are configured for Do Not Disturb (DND), Call Forward (CFWD), or Discreet Ringing functionality, enabling the feature will cause a graphical LED replacement indicator (i.e. a red stroke) to appear above the bottom softkey.
DEF34270/CLN38149	When using the Mitel Clearspan call manager, an audio level issue was observed if the "ring audibly enable" parameter was enabled and a secondary call was incoming. This issue has been corrected.
DEF34544/CLN39336	An issue was observed whereby users were unable to enter a new static IP address through the phone's UI in certain scenarios due to a subnet mismatch. This issue has been corrected.
DEF34563/CLN34564	6867i: When using the phone with the MiVoice MX-ONE call manager, attempting and then cancelling a transfer would cause an issue with conference key mapping functionality. This issue has been resolved.
DEF37872	6867i: Users were unable to navigate to the paging screen when in an active call. This issue has been fixed and users can now select the paging line by navigating to the Line Selection screen (by pressing the left navigation key while on the active call).
DEF39046	6863i and 6865i: When the screen language was configured as German, users were unable to manually edit the date on the phone using the phone's native UI. This issue has been corrected.
DEF39064	6867i: After configuring Line 1 with account information (including the screen name, user name, proxy server and registrar server), if all the account information was then subsequently removed through the Web UI, the phone would unexpectedly display "L2:" and the screen name on the status bar of the home/idle screen. This issue has been fixed.
DEF39087/DEF39228/ DEF39229/CLN39235	Various UI issues with regards to the Discreet Ringing key were resolved in Release 4.1.0.
DEF39136/CLN39245	M685i Expansion Module: An issue was observed when the "blf activity page switch" feature was enabled and a BLF on the second page of the expansion module was in the ringing state. The phone would switch to the second page as expected, but pressing the ringing BLF softkey would result in a softkey from the previous page being invoked. This issue has been fixed.
DEF39151	An issue was observed whereby the LED for the Call Forward softkey did not illuminate when call forward functionality was enabled for a line other than Line 1. This issue has been resolved.
DEF39202	6867i and 6869i: When using a custom ring tone, pressing the Silence softkey presented during an incoming call did not have the desired effect. This issue has been fixed.

ISSUE NUMBER	DESCRIPTION OF FIX
DEF39379	M685i Expansion Module: Line softkeys on the M685i Expansion Module did not change colors as was expected when the corresponding line's state changed. This issue has been corrected.
DEF39502/CLN39630	6867i: When the "voice mail indicator" parameter was enabled and a user had a voice mail pending on a specific line, accessing and deleting the voice mail did not remove the voice mail indicator from the Line softkey as was expected. This issue has been fixed.
DEF39512/CLN39856	6867i and 6869i: When using the BroadSoft BroadWorks Executive and Assistant Services feature, the "Via" field (used for the Diversion feature) was incorrectly being displayed on the Assistant's phone when a filtered call was incoming. This issue has been resolved.
DEF39513	6867i and 6869i: When using the BroadSoft BroadWorks Executive and Assistant Services feature, the "Push" softkey was not offered in scenarios when the Assistant accepted a filtered call while already on an active call. This issue has been corrected.
DEF39594/CLN39682	UI strings/labels associated with the Automatic Call Distribution (ACD) feature on the phones were not being translated as expected when the phone's screen language was changed. This issue has been fixed.
DEF39823	6867i: Users were unable to perform a blind transfer using the Transfer hardkey to a Callers or Redial List entry. This issue has been corrected and users can now perform a blind transfer by pressing the Transfer hardkey (while on an active call), navigating to the Redial or Callers List, selecting an entry, and then pressing the Transfer hardkey again.
DEF39878	6867i and 6869i: Blind transfers can now be performed to Directory entries by pressing the Xfer softkey (while on an active call), navigating to the Directory, pressing the right navigation key while on a selected entry (to access the entry's detailed view), and then pressing the Xfer softkey again.
DEF40004/DEF40059	M680i and M685i Expansion Modules: The on/off response time for LEDs corresponding to BLF/List keys on the expansion modules has significantly improved in Release 4.1.0 when using the modules with the MiVoice Office 400 call manager.
DEF40013	6867i and 6869i: If a hard key was reprogrammed for Redial functionality, pressing the new Redial key twice did not automatically initiate a call to the last dialed number. This issue has been resolved.
DEF40070	6867i and 6869i: When using the Visitor Desk Phone (VDP) hot desk feature, an "Authorizing..." message is now displayed on the phone when logging in. This message has been added to ensure that users are aware that the login process is in progress.
DEF40108	6867i: If using the phone with the BroadSoft BroadWorks call manager, UI and stability issues were observed when enabling and disabling the Call Forward feature. These issues have been resolved.
DEF40150	6867i and 6869i: Quickly pressing an SCA line key twice in succession at times caused stability issues on the phone. These issues have been corrected.
Audio	
DEF38790	An issue was observed whereby distorted audio could be heard when playing certain WAV files containing extraneous data. This issue has been fixed.

ISSUE NUMBER	DESCRIPTION OF FIX
DEF39293	With the call waiting tone enabled and the ring audibly feature disabled, during an outgoing call, if a secondary call was incoming and then cancelled, the ringback tone for the outgoing call could not be heard. This issue has been corrected.
DEF39312	An issue was observed whereby the Call Hold Reminder ring splash was not audible in certain situations when a blind transfer was attempted but the transfer recipient did not answer. This issue has been resolved.
DEF39353	6867i and 6869i: When using a specific USB headset, users were unable to hear a ringback tone for the second leg of an attempted conference or transfer.
DEF39955	BV16 (8K) and BV32 (16K) have been removed from the list of supported audio codecs in Release 4.1.0.
Network	
ENH38345	For security purposes, anonymous Diffie-Hellman cipher suites have been removed from the list of supported SSL and TLS ciphers in Release 4.1.0. For a list of supported ciphers and cipher suites, refer to the <i>6800i Series SIP Phones Administrator Guide</i> .
ENH39387	6865i and M685i Expansion Module: Connecting an M685i Expansion Module to a 6865i now causes the LLDP power class to automatically switch to Class 3.
ENH39933/ENH40283	Various changes have been implemented in Release 4.1.0 to improve security robustness.
DEF40037	6867i: When using a phone with Persistent TLS enabled with the MiVoice MX-ONE call manager, a stability issue was observed after logging in and out of various accounts multiple times. This issue has been resolved.
Troubleshooting	
ENH40111	When the phone is configured to automatically send a crash log to a pre-defined server, the date and time in the filename of the log now refers to the date and time of the crash, not the date and time of when the file was uploaded. Additionally, the crash log file is now sent compressed (gzip file format) along with a summary.log file containing details of the last 10 error messages generated by the phone's modules during startup.
XML	
DEF36481	When using an XML softkey to transfer system info files (i.e. local.cfg and server.cfg) to a server, a "Files Sent" message is now displayed on the phone's screen acknowledging a successful transfer.
DEF39633	6865i, 6867i, and 6869i: An issue was observed whereby users were unable to change the ring splash of a BLF/List key dynamically using XML. This issue has been fixed.
DEF39731	6867i: When using the phones with the Mitel 100 call manager and a specific XML script, an intermittent stability issue was observed if the phone received several XML NOTIFY messages in a small amount of time and the user tried to exit the application. This issue has been corrected.
DEF39771/CLN39965	6867i and 6869i: An issue was observed whereby upon receiving a SIP XML NOTIFY to change a hard key's LED flash behavior, the LED did not respond accordingly. This issue has been resolved.

ISSUE NUMBER	DESCRIPTION OF FIX
DEF39804	6863i and 6865i: When the "GoodbyeLockInURI" parameter was set and "LockIn" was defined as "yes", if an XML page was brought up on the phone during a call, pressing the Goodbye key exited the XML page as expected, but incorrectly terminated the call. This issue has been corrected and pressing the Goodbye key in such scenarios now exits the XML page only.
DEF39807	6865i: In certain scenarios, due to a text wrapping issue, words on a screen using the TextScreen XML object were being duplicated. This issue has been fixed.

CONTACTING MITEL SUPPORT

If you have read this release note, and consulted the Troubleshooting section of your phone model's manual and still have problems, please contact Mitel Support via one of these methods:

North America

- Toll Free at 1-800-574-1611
- Online at <http://www.mitel.com/content/mitel-technical-support>

Outside North America

Please contact your regional Mitel Technical Support.

