OpenScape Business V2

Tutorial
VoIP Interfaces

Version 2.0
Definitions

HowTo
An OpenScape Business HowTo describes the configuration of an OpenScape Business feature within the OpenScape Business administration. It addresses primarily trained administrators of OpenScape Business.

Tutorial
Within the OpenScape Business tutorials procedures for installation, administration and operation of specific devices, applications or systems, which are connected to OpenScape Business, are described. The tutorial addresses primarily trained administrators of OpenScape Business.
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1. Supported Interface configurations

1.1. WAN interface not used

In this configuration OpenScape Business is connected to the network via the LAN interface only. The WAN interface is NOT used. If VPN connections are necessary, these connections MUST be maintained by the connected routers. The VPN client in OpenScape Business is NOT used. This configuration is valid for OSBiz-X and OSBiz-S.

Configuration hints:

- Static routes MUST be configured to other sites which are not reachable via the default router
- VPN connections established by OpenScape Business via LAN interface are NOT supported
- The connection to a Home office using OpenStage HFA/SIP phones (Device@Home) is possible:
  - via a configured VPN tunnel in the Access Router.
1.2. WAN configured as TCP/IP interface

If the WAN interface is configured in TCP/IP mode all VoIP connections to the internet MUST be done via the WAN interface. All other VoIP devices MUST be connected via the LAN interface. This configuration is valid for OSBiz-X and OSBiz-S.

**Configuration hints:**

- No ITSP/Circuit connections possible via LAN
- SkypeForBusiness connections are not possible in this configuration
- Static routes MUST be configured to other sites which are not reachable via the default router
- The WAN=TCP/IP interface can be operated either in DHCP mode or with static assigned IP-Address (depends on the ISP and the provided access Router)
- If the interface is operated in DHCP mode VPN connections are NOT yet supported through this interface.
- SIP@Home scenarios are possible using UDP only, see separate documentation available under [http://wiki.unify.com/wiki/How_to_collection_and_tutorials_for_OpenScape_Business#Device40Home](http://wiki.unify.com/wiki/How_to_collection_and_tutorials_for_OpenScape_Business#Device40Home)
1.3. WAN configured as DSL interface

If the WAN interface is configured as DSL interface to establish the internet connection all traffic towards the internet MUST use the WAN interface. All other VoIP devices MUST be connected via the LAN interface. This configuration is valid for OSBiz-X only.

Configuration hints:

- The integrated DSL Router is suitable for small installations only. For larger installations an external Router MUST be used (see 1.1 and 1.2)
- No ITSP connection possible via LAN
- This configuration is not released for Circuit and SkypeForBusiness connections
- Static routes MUST be configured to other sites which are not reachable via the default router (DSL)
- Only one subnet per site is supported by the VPN Wizard. The example above requires manual created VPN rules between Site B and C
- Device@Home scenarios are not supported in this configuration, see separate documentation available under http://wiki.unify.com/wiki/How_to_collection_and_tutorials_for_OpenScape_Business#Device.40Home
1.4. Restrictions when using LAN and WAN in parallel

When the WAN interface is configured, all ITSP connections MUST use this interface.

It is strongly recommended to use the same interface for ITSP connections and all other internet traffic. (either all over LAN or all over WAN)

Nevertheless under certain circumstances a customer wants to have a different setup, where the system will use the WAN for ITSP connections whereas the default router to the internet is located at the LAN interface.

In such a configuration several issues may prevent successful VoIP calls. At least the following configuration MUST be done:

- **Manual configuration of routing**
  As the default router is connected to the LAN interface, all destinations which needs to be addressed for ITSP calls MUST have static routes. This MUST include all needed SIP servers (Proxies, Registrar) as well as all possible media endpoints. Static routes must be configured with appropriate means (e.g. WBM in OSBiz-X, Yast in OSBiz-S)
  This manual configuration is not necessary if the WAN interface has an address out of the ITSP network. (ITSP operating a private VoIP network with or without access device)

- **Firewall configuration**
  The firewall located between the ITSP and the WAN interface MUST be manually opened on all ports needed for ITSP connections. This MUST include all needed SIP servers (Proxies, Registrar) as well as all possible media endpoints.

- **STUN**
  In this configuration STUN cannot be used to determine the public IP Address. STUN MUST be switched off or used with static IP address (at the WAN router)

- **Due to the restriction that ALL ITSP’s MUST use the same interface, this configuration is limited to ONE ITSP only**

2. General Restrictions

- As the WAN interface is intended to be used as the ITSP interface it is **NOT** allowed to address this interface by
  - any IP-Endpoints at the WAN interface (HFA and SIP)
  - any networked nodes

- If two (or more) ITSP’s are configured in the system
  - all ITSP’s MUST use the same internet connection
  - Usage of STUN can be switched on or off individually for each provider, but ALL providers MUST share the same STUN mode (e.g. automatic, port preserving router, ...) and will use the same STUN server (even if different STUN servers may be configured at the ITSP’s).

- The Admin-Interface of the OCCM/OCCL cannot be used to connect any type of VoIP endpoints or trunks.

- The LAN2-Interface of the OCAB cannot be used to connect any type of VoIP endpoints or trunks.

- In Scenarios where the WAN interface is used, NAT is activated at the WAN interface.

OpenScape Business VPN wizard:

- A Homeoffice can be connected via 3rd party VPN router. This scenario requires configuration in Expert mode, as the VPN rules created by wizard can probably not be configured in the 3rd party VPN router.

- If a Teleworker is connected via VPN using a single PC with VPN client software (e.g. Shrew Soft) the configuration can be made by using the OpenScape Business VPN wizard.

- Only one subnet per site is supported by the VPN Wizard. The examples above showing different subnets require manual created VPN rules between Site B and C
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