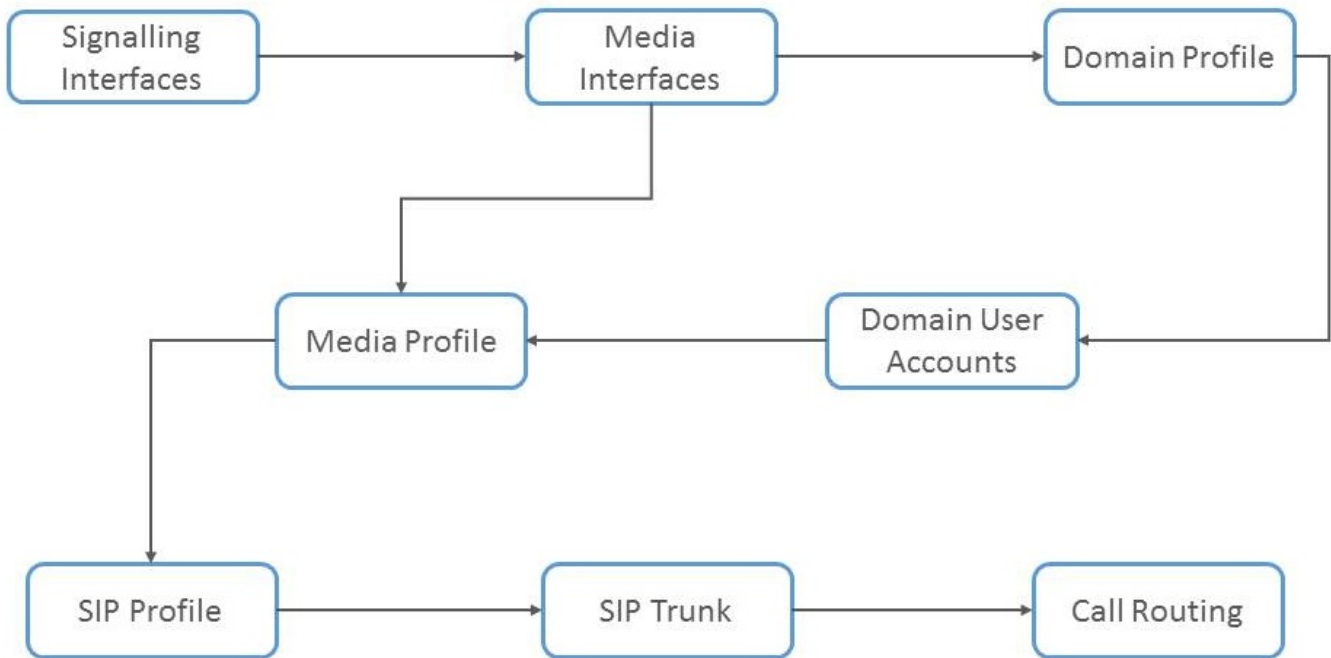


# SBC Quick Config Overview

Before diving into detailed step by step configuration, this page will outline all mandatory configuration steps in order to properly configure your Sangoma SBC.



## General

- Change default password
- Confirm SBC has the correct license installed

## Network Planning

- Draw out a network diagram
- Identify IP networking scenario for SBC
  - Is SBC straddling two networks
  - Is SBC behind a router
- Identify SIP signaling ip addresses
  - Is SBC going to have private or public IP address
- Identify RTP media ip address
  - How many media ip addresses can you have?
  - Is the RTP media ip address going to be same or different than SIP the signaling ip address
- Identify SBC scenario type
  - Carrier or Network Core
    - Providing SIP Trunks to customers
    - Hosted PBX provider
  - Enterprise
    - IP PBX that requires remote user support
    - IP PBX that requires SIP Trunking support
    - IP PBX that requires both remote user and SIP trunking.
- SIP Signaling Configuration
  - How many SIP profiles do you need?
- RTP Media Configuration
  - What codecs are going to be used?
  - Which Media profiles will be attached to SIP Profiles
- Security Considerations
  - Any special security considerations?
  - Is authentication enabled on the PBX behind the SBC?

## Network Configuration

Regardless of the type of SBC deployment you choose, you first must configure the signaling interfaces and media interface network information.

- [SBC Signaling Interface Configuration](#)
- [SBC Media Interfaces](#)

## SBC Configuration Options

- SBC Configuration depends on the above Network Planning Scenario.
  - SIP Trunking
  - Access (Remote User or Upper Registration)
  - Combined

All Sangoma SBC's support both SIP Trunking and Access simultaneously.

## SBC General Configuration

- [Configure SIP Domain](#)
  - In order to handle SIP registrations from the remote users, the SBC requires domain (SIP realm) configuration. In a typical scenario with registrations involved you will have at least one domain.
  - A SIP Domain is bound to a SIP profile.
    - SIP Domain can be bound to one or many SIP Profiles
- [Configure SIP Profile](#)
  - SBC has a minimum of two SIP Profiles. **External** and **Internal**.
  - SIP profile listens on a specific port (eg: 5060) and accepts incoming SIP traffic.
  - Depending on the SBC scenario:
    - **External** SIP Profile interfaces to the ITSP or SIP trunk provider
    - **Internal** SIP Profile interfaces to the local PBX or IP end points

Sangoma SBC does not have a limit on how many SIP Profiles can be created

- [Configure Media Profile](#)
  - Media profiles are used to define RTP parameters and are bound to one or more SIP Profiles
    - Depending on the use case:
      - User can create one Media profile per SIP profile
      - User can create one Media profile for many SIP Profiles.
  - SIP profile uses the Media profile information to negotiate SDP information
    - Codecs & P-times
    - Local RTP ports

Sangoma SBC runs Media RTP in custom Sangoma HW DSP. This allows Sangoma SBC to scale to thousands of RTP sessions without quality or capacity degradation.

- [Configure Call Routing Profile](#)
  - A call routing profile is used to route SIP signaling from one SIP Profile to another.
  - A call routing profile is bound to a SIP profile.
    - The call routing profile can be bound to one or many SIP Profiles
  - Once a SIP call receives a SIP INVITE it evokes the "call routing profile" to determine how to route a call.

Sangoma SBC support GUI call routing configuration as well as Advanced XML call routing configuration.

- **Configure Header Manipulation Profile**
  - Used to resolve SIP protocol variances between different vendors
  - Or to hide the SIP topology by removing VIA headers

## SBC Security Configuration

- **Set SIP Signaling threshold limits to prevent DDOS attacks**
  - Invite and Registration storms
- **Set Intrusion Detection and Prevention**
  - To prevent known attack patterns
- **Set IP Firewall**
  - To allow certain IP address range, depending on network scenarios

## Apply Configuration

The changes made in the Configuration section of the WebUI are only stored on the scratch disk. User **MUST** proceed to Apply page in the Management Section to save new configuration

There are two ways to apply the configuration.

- Most of the pages across the system will notify you as soon as you make changes that require to be applied.
  - You can click there on "Apply Configuration".
- Alternatively one can navigate to "**Configuration -> Management -> Apply**"