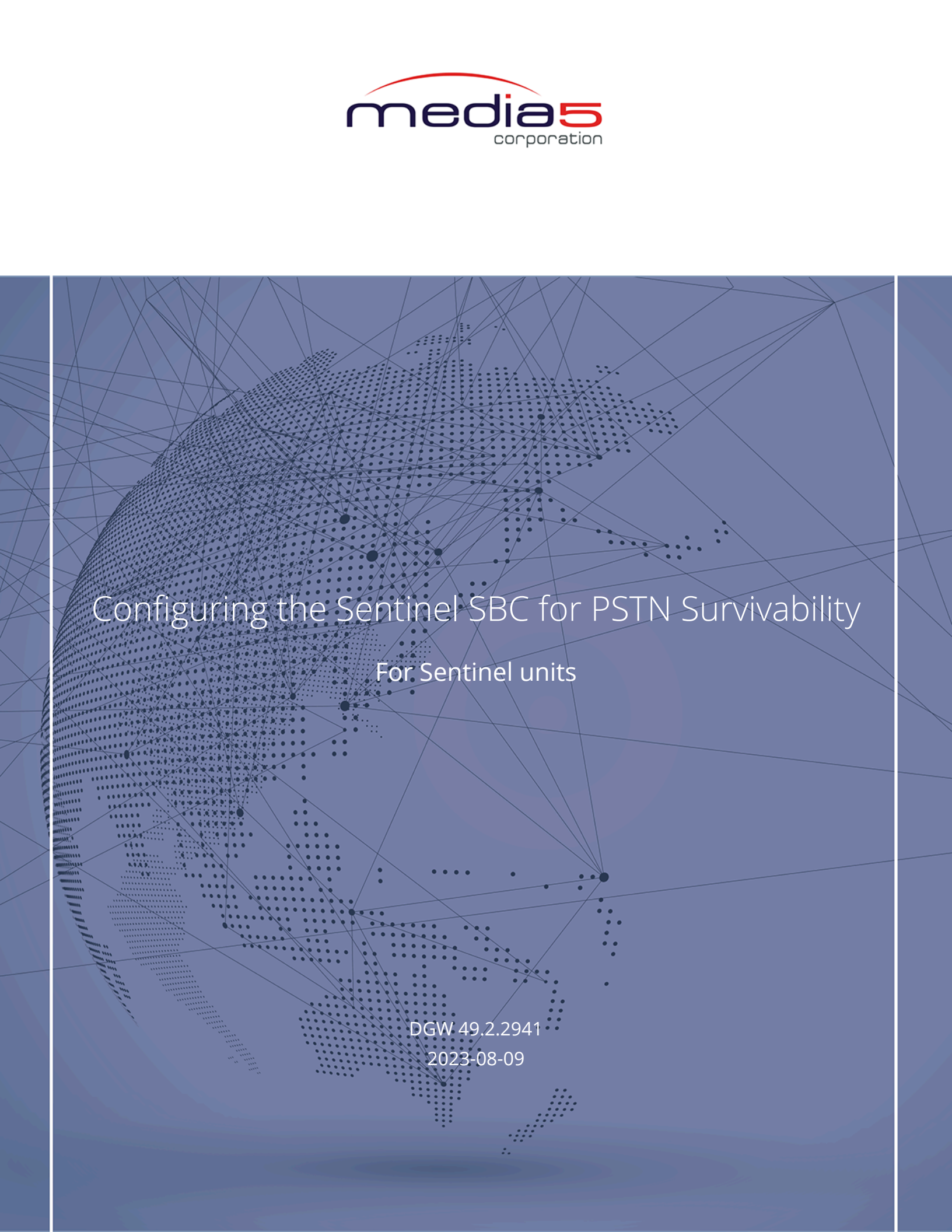


The background of the slide is a dark blue gradient with a complex, abstract graphic. It features a network of thin, light blue lines connecting various points, creating a mesh-like structure. Overlaid on this is a large, semi-transparent globe. The globe is composed of a grid of small, dark blue dots, with some dots being larger than others, suggesting a digital or networked theme.

Configuring the Sentinel SBC for PSTN Survivability

For Sentinel units

DGW 49.2.2941
2023-08-09

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Information to Know Before Starting

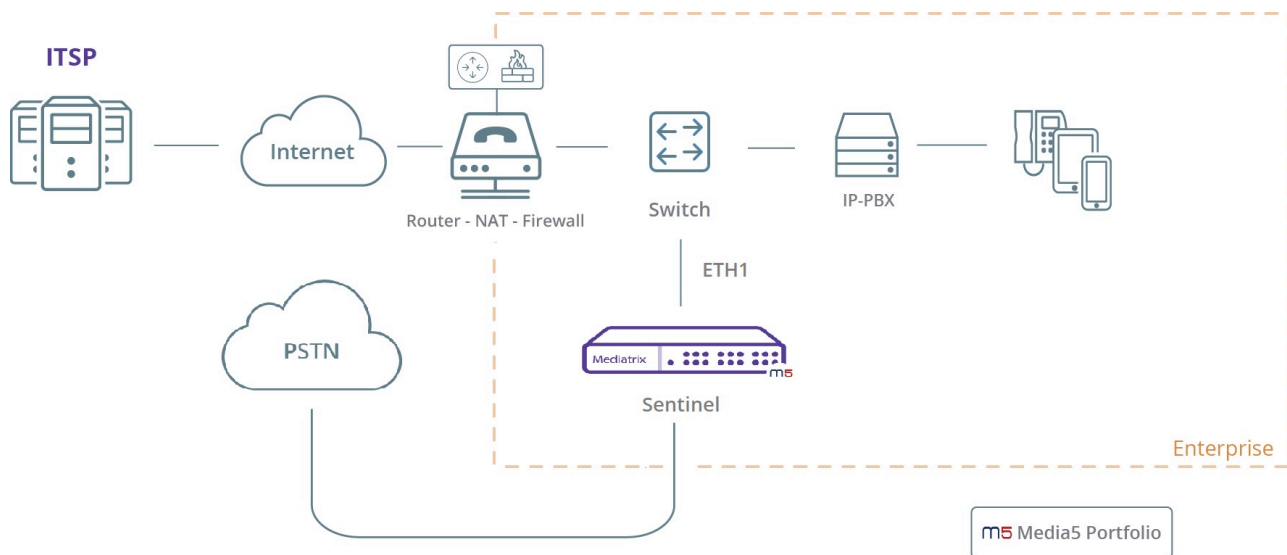
This Technical Bulletin is based on the [SBC SIP Trunking Configuration - Sentinel in the LAN](https://documentation.media5corp.com) Configuration Note published on the Media5 documentation portal at <https://documentation.media5corp.com> and is planned to be used as a supplementary guide. Please make sure that you have followed all the steps described in the [SBC SIP Trunking Configuration - Sentinel in the LAN](https://documentation.media5corp.com), before following this guide.

Basic Concepts

PSTN Survivability

This scenario describes how to configure a Sentinel SBC, so that calls fail over to the PSTN line when the SIP service provider is unreachable.

- The Sentinel unit is located in the LAN, behind a Near-End NAT
- Only port ETH1 is used
- The Sentinel unit is set as a Demarcation point.
- The Sentinel unit may or may not register to SIP service provider.
- When the SIP Provider gets unreachable, calls go through the PSTN port of the Sentinel.



Hunt1 Default Group

By default, when the main SIP Trunk is down, calls will be routed to a hunt group of PSTN interfaces. This hunt group is called "Hunt1" and is factory installed.

The Hunt1 group is consisted of the following telephony ports:

isdn-Slot1/E1T1	fxo-Slot2/FXO1	fxo-Slot4/FXO1	fxo-Slot6/FXO1	fxo-Slot8/FXO1
isdn-Slot2/E1T1	fxo-Slot2/FXO2	fxo-Slot4/FXO2	fxo-Slot6/FXO2	fxo-Slot8/FXO2
isdn-Slot3/E1T1	fxo-Slot2/FXO3	fxo-Slot4/FXO3	fxo-Slot6/FXO3	fxo-Slot8/FXO3
isdn-Slot4/E1T1	fxo-Slot2/FXO4	fxo-Slot4/FXO4	fxo-Slot6/FXO4	fxo-Slot8/FXO4
isdn-Slot5/E1T1	fxo-Slot3/FXO1	fxo-Slot5/FXO1	fxo-Slot7/FXO1	
isdn-Slot6/E1T1	fxo-Slot3/FXO2	fxo-Slot5/FXO2	fxo-Slot7/FXO2	
isdn-Slot7/E1T1	fxo-Slot3/FXO3	fxo-Slot5/FXO3	fxo-Slot7/FXO3	
isdn-Slot8/E1T1	fxo-Slot3/FXO4	fxo-Slot5/FXO4	fxo-Slot7/FXO4	

To change the priority of the ports that will be used by the Sentinel on a SIP Server failure, please refer to: [Changing Port Priority of the Hunt1 Group](#) (p.8).

Basic Configuration Steps

Configuring Black Listing in the **wan_ip_trunk_ca** Call Agent

Information

If you are not familiar with the meaning of the fields and buttons, click **Show Help**, located at the upper right corner of the Web page. When activated, the fields and buttons that offer online help will change to green and if you hover over them, the description will be displayed.

Steps

- 1) Go to **SBC/Configuration**.
- 2) In the **Call Agent Configuration** table, click  next to **wan_ip_trunk_ca**.
- 3) In the **Configure Call Agent** table, set the **Keep-Alive Interval** field to 30.
- 4) Set the **Blacklisting Duration** to 60.
- 5) In the **Blacklisting Error Codes** field, enter the SIP codes (comma-separated) that will make the Sentinel mark the SIP server as unreachable.
- 6) Click **Save**.
- 7) Click **Apply** to apply all changes to the configuration.
- 8) Click **Apply** to apply all changes to the configuration.

Result

At the top of the screen, **No** will be displayed in the **Config.Modified** field, indicating that the configuration that was modified is now applied to the system. When the Mediatrix SBC will use the selected Call Agent for a communication, the selected parameters will be applied.

Configure Call Agent		Value
Call Agent Parameters		
Name	wan_ip_trunk_ca	
Enable	☒	
Gateway		
Signaling Interface	uplink_s	
Media Interface	uplink_m	
Peer Host		
Peer Network		
Force Transport	None	
Monitoring and Blacklisting Parameters		
Keep-Alive Interval	30	
Blacklisting Duration	60	
Blacklisting Delay	0	
Blacklisting Error Codes		

Next Step

[Associating Routing Rulesets to Your Configuration \(p.7\)](#)

Associating Routing Rulesets to Your Configuration

Steps

- 1) Go to **SBC/Configuration**
- 2) In the **Routing Rulesets** table, from the **Name** selection list, select **lan_pbx_to_wan_ip_trunk_failover_to_trunk_dm**.
- 3) Click **+**.
- 4) From the **Name** selection list, select **trunk_lines_to_local_pbx_dm**.
- 5) Remove the lan_pbx_to_wan_ip_trunk_dm routing ruleset, by clicking **-** next to it
- 6) Click **Save**.
- 7) Click **Apply** to apply all changes to the configuration.

Result

Routing Rulesets			
Priority	Name	Parameters	
2	wan_ip_trunk_to_lan_pbx		↑ ↓ -
3	registration_to_wan_ip_trunk		↑ ↓ -
4	lan_pbx_to_wan_ip_trunk_failover_to_trunk_dm		↑ ↓ -
5	trunk_lines_to_local_pbx_dm		↑ ↓ -
+			

Next Step

[Changing Port Priority of the Hunt1 Group \(p.8\)](#)

Changing Port Priority of the Hunt1 Group

Information

This step is optional. Once the, [Configuring Black Listing in the wan_ip_trunk_ca Call Agent \(p.6\)](#) and [Associating Routing Rulesets to Your Configuration \(p.7\)](#) are completed, when the main SIP Trunk is down, calls will be routed to a hunt group of PSTN interfaces. This hunt group is called **Hunt1** and is factory installed. For more details, refer to the [Hunt1 Default Group \(p.4\)](#) section.

Steps

- 1) Go to **Call Router/Route Config**.
- 2) In the **Hunt** table, click  located next to **Hunt1**.
- 3) In the **Configure Hunt 1** table, in the **Destinations** field, change the order of the PSTN ports that will be used when the SIP server is down.
- 4) Click **Save**
- 5) Click **Save** again.

Result

When the SIP provider cannot be reached, calls will be routed to the Sentinel PSTN ports with the order defined in the **Hunt1** hunt group.

Hunt						
Index	Name	Destinations	Selection Algorithm	Timeout (seconds)	Causes	
1	Hunt1	isdn-Slot1/E1T1,isdn-Slot2/E1T1,isdn-Slot3/E1T1,isdn-Slot4/E1T1,isdn-Slot5/E1T1,isdn-Slot6/E1T1,isdn-Slot7/E1T1,isdn-Slot8/E1T1,fxo-Slot8/FX01,fxo-Slot8/FX02,fxo-Slot8/FX03,fxo-Slot8/FX04,fxo-Slot2/FX01,fxo-Slot2/FX02,fxo-Slot2/FX03,fxo-Slot2/FX04,fxo-Slot3/FX01,fxo-Slot3/FX02,fxo-Slot3/FX03,fxo-Slot3/FX04,fxo-Slot4/FX01,fxo-Slot4/FX02,fxo-Slot4/FX03,fxo-Slot4/FX04,fxo-Slot5/FX01,fxo-Slot5/FX02,fxo-Slot5/FX03,fxo-Slot5/FX04,fxo-Slot6/FX01,fxo-Slot6/FX02,fxo-Slot6/FX03,fxo-Slot6/FX04,fxo-Slot7/FX01,fxo-Slot7/FX02,fxo-Slot7/FX03,fxo-Slot7/FX04,	Sequential	0	31, 34, 38, 41, 42, 43, 44, 47	   
						

DGW Documentation

Mediatrix devices are supplied with an exhaustive set of documentation.

Mediatrix user documentation is available on the [Media5 Documentation Portal](#).

Several types of documents were created to clearly present the information you are looking for. Our documentation includes:

- **Release notes:** Generated at each GA release, this document includes the known and solved issues of the software. It also outlines the changes and the new features the release includes.
- **Configuration notes:** These documents are created to facilitate the configuration of a specific use case. They address a configuration aspect we consider that most users will need to perform. However, in some cases, a configuration note is created after receiving a question from a customer. They provide standard step-by-step procedures detailing the values of the parameters to use. They provide a means of validation and present some conceptual information. The configuration notes are specifically created to guide the user through an aspect of the configuration.
- **Technical bulletins:** These documents are created to facilitate the configuration of a specific technical action, such as performing a firmware upgrade.
- **Hardware installation guide:** They provide the detailed procedure on how to safely and adequately install the unit. It provides information on card installation, cable connections, and how to access for the first time the Management interface.
- **User guide:** The user guide explains how to customise to your needs the configuration of the unit. Although this document is task oriented, it provides conceptual information to help the user understand the purpose and impact of each task. The User Guide will provide information such as where and how TR-069 can be configured in the Management Interface, how to set firewalls, or how to use the CLI to configure parameters that are not available in the Management Interface.
- **Reference guide:** This exhaustive document has been created for advanced users. It includes a description of all the parameters used by all the services of the Mediatrix units. You will find, for example, scripts to configure a specific parameter, notification messages sent by a service, or an action description used to create Rulesets. This document includes reference information such as a dictionary, and it does not include any step-by-step procedures.

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