

A blue speech bubble graphic with a black outline and a red play button icon in the top right corner. The text 'ClearIP' is in a dark blue rounded rectangle, and 'WEBINAR' is in white below it.

ClearIP WEBINAR

DNO Call Blocking with ClearIP

ClearIP User Group Webinar

Date:	October 8, 2025
Presenters:	Blake King Sean Archer Marc St-Onge

Agenda

- Review of DNO call blocking rules
- How to comply using ClearIP
- How to prepare for the deadline – Demo!
- How to handle special cases – Demo!
- Technical support for DNO call blocking
- Questions



DNO Rules

- All providers in the call path must block calls that are highly likely to be illegal based on a reasonable DNO list
- Such list may contain only:
 - NANP numbers that are not valid
 - Valid NANP numbers that are not allocated to a provider
 - Valid NANP numbers that are allocated to a provider but are unused
 - Numbers for which the subscriber has requested blocking
- A list so limited in scope that it leaves out obvious numbers that could be included with little effort may be deemed unreasonable
- The effective date is December 15, 2025

Link to blog post and 8th Report and Order:

<https://transnexus.com/blog/2025/dno-blocking-rule-follow-up/>



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- Too few or too many digits
- Using non-telephony digits

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Calling number is using an unassigned area code or is part of an unallocated number block

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Calling number is allocated,
but not used

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Calling number is found on a list of numbers which never make outbound calls

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Compliance Using ClearIP

- The **Inbound Shield** feature does exactly that!
 - Apply the feature to **outbound and inbound** calls
 - Set the **Invalid Calling Number Action** to **Block**
 - Set the **High Risk Calling Number Action** to **Block**

ClearIP®								
Home Organization Configuration Billing Routing STI Inbound Services Whitelist/Blacklist Fraud Analytics								
Inbound Shield Policies ?								
+ Add Update Copy Delete Refresh File								
<input type="checkbox"/>	Operator	Called Number ▲	Status	Invalid Calling Number Action	High Risk Calling Number Action	Comment	SBC	
	Equals ▼	Starts With ▼	Equals ▼	Equals ▼	Equals ▼	Contains ▼	Equals	
	Filter ▼	Filter	Filter ▼	Filter ▼	Filter ▼	Filter	Filter	
<input type="checkbox"/> +	Operator - Robocall Mitigation		Enabled	Block	Block			
<input type="checkbox"/> +	SHAKEN Authentication Demo		Disabled	Report Only	Report Only			

Recommended Approach

- Apply Inbound Shield to all your calls
 - But set the **Invalid Calling Number Action** to **Report Only** at first
 - Then, review what calls could have been blocked
- Sample invalid calling numbers:
 - 101 - PBX is sending the extension
 - 4045668825 - Missing the leading 1
 - 14041668825 - N of NXX can only use digits 2 to 9
 - 140456688259 - Too many digits
 - 19999999999 - 999 is an unassigned area code



View Calls Using Invalid Calling Numbers in ClearIP

ClearIP® Home Organization Configuration Billing Routing STI Inbound Services Whitelist/Blacklist Fraud Analytics

SIP Messages ⓘ

Rolling: Hour Day Week Month Year
Current: Hour Day Week Month Year
Previous: Hour Day Week Month Year

From 2025-10-06 02:11 PM To yyyy-mm-dd --:-- Submit Refresh File Columns

Operator	Timestamp	Service Provider	Group	User	Translated Calling Number	Translated Called Number	Asserted Calling Number	Calling Country	Called Country	Invalid Calling Number	Inbound Shield	Reason	Code	Show Message
Equals		Equals	Equals	Equals	Starts With	Starts With	Starts With	Equals	Equals	Equals	Equals	Equals	Equals	
Filter		Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	
+ Retail Provider Demo	2025-10-06 15:11:06.768	Retail Provider Demo	Retail Provider Demo	Retail Provider Demo	14042894858	14046079	14042894858	United States	United States	No	Yes	No Fraud Detected	302	Show
+ Retail Provider Demo	2025-10-06 15:11:05.697	Retail Provider Demo	Retail Provider Demo	Retail Provider Demo	15032522243	44	15032522243	United States	United Kingdom	No	Yes	No Fraud Detected	302	Show
+ Retail Provider Demo	2025-10-06 15:11:04.608	Retail Provider Demo	Retail Provider Demo	Retail Provider Demo	12125559000	00	12125559000	United States	United States	No	Yes	No Fraud Detected	302	Show
+ Enterprise XYZ Inc.	2025-10-06 15:11:04.040	Southeast Region	Florida	Orlando			14047920076	United States	United States	No	Yes	No Fraud Detected	404	Show
+ Retail Provider Demo	2025-10-06 15:11:03.564	Retail Provider Demo	Retail Provider Demo	Retail Provider Demo			14045550186	United States	United States	No	No	Blacklisted	603	Show
+ Enterprise XYZ Inc.	2025-10-06 15:11:02.988	Southeast Region	Georgia	Atlanta			14046079363	United States	United States	No	Yes	No Fraud Detected	404	Show
+ Retail Provider Demo	2025-10-06 15:11:02.453	Retail Provider Demo	Retail Provider Demo	Retail Provider Demo	18132043222	14046079366	18132043222	United States	United States	No	Yes	No Fraud Detected	302	Show
+ SHAKEN Verification	2025-10-06	Little Fern	Trusted	Big Tree	12012104152	19362955407	12012104152	United States	United States	No	Yes	No STI Header	603	Show

Add the **Invalid Calling Number** column and filter for Yes

Add the **Inbound Shield** column to see which calls get treated

Add the **Asserted Calling Number** column to view the invalid numbers

Investigate the calls which could be blocked before the deadline on **December 15!**

Special Cases

- Asserted Calling Number comes from:
 - P-Asserted-Identity, if present
 - If not present, From header

P-Asserted-Identity	From	Asserted Calling Number	Comment
	anonymous	anonymous	Call has no calling number <ul style="list-style-type: none">• What to do? Add PAI and Privacy for outbound calls• What will other service providers do?
4045668825	404566825	4045668825	Not E.164 (no +1) <ul style="list-style-type: none">• Send NANP numbers with +1• Send international numbers with +
52xxxxxxxxx	52xxxxxxxxx	152xxxxxxxxx	Not E.164 (no +) <ul style="list-style-type: none">• Calling Number Translation Rules add a leading 1• Send international numbers with +
	+14045668825	4045668825	Incorrect Calling Number Translation Rules <ul style="list-style-type: none">• Should remove only the +

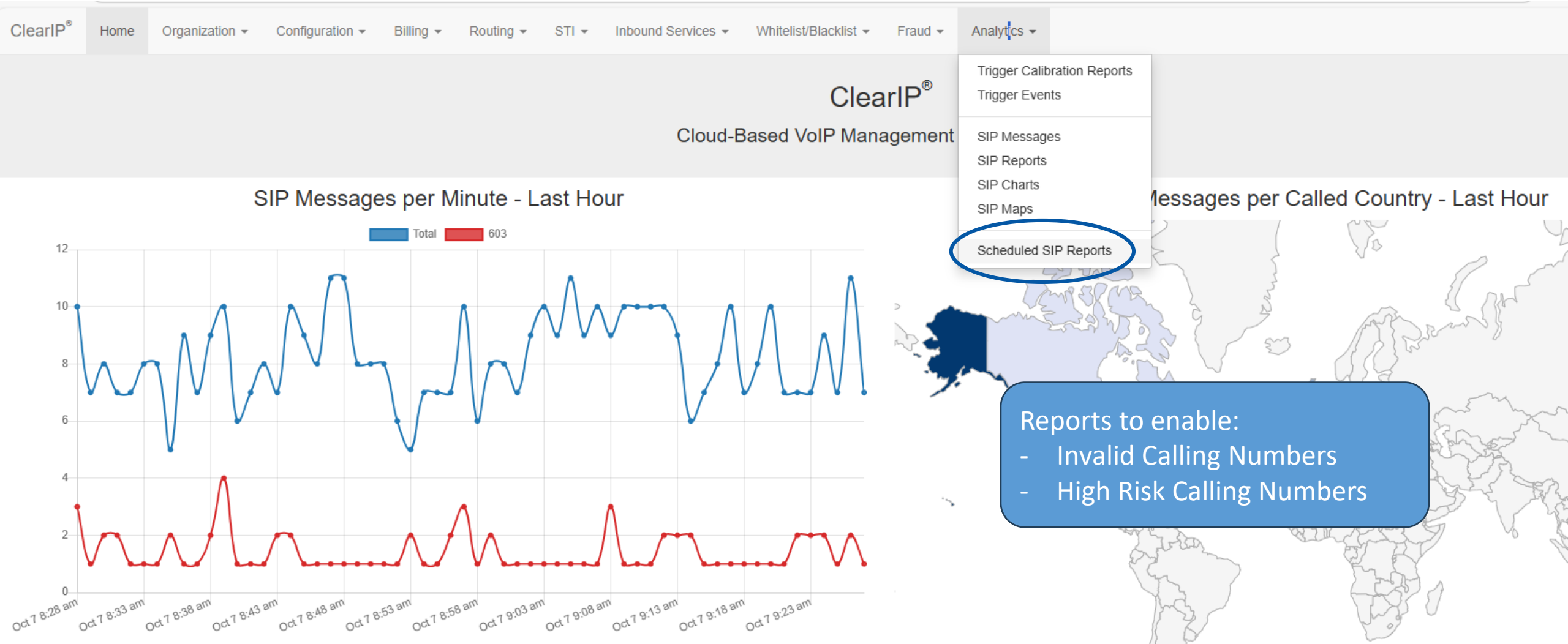
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Whitelist calls to/from emergency numbers!

P-Asserted-Identity	From	Asserted Calling Number	Comment
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Obtain Weekly Reports via Email



Support for DNO Call Blocking

- TransNexus Sales Engineers can help you
 - Please open a support ticket at <https://tickets.transnexus.com/>
- After November 21, approaching Thanksgiving, support for DNO call blocking may require:
 - Reserving and scheduling a time window for technical support
 - \$225/hour professional services for ClearIP configuration and troubleshooting (probably 1 hour is sufficient)

Please be patient as we expect to be very busy!



Questions?

Contact: sales@transnexus.com

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