



SECURITIES INDUSTRY AUTOMATION CORPORATION

CTA Pillar SIP

CERT Environment Guide

Version: 1.0c

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Document History

Version	Date	Description
Version 1.0	February 11, 2020	Initial document for publication
Version 1.0a	February 19, 2020	Minor updates to Appendix A tables and formatting
Version 1.0b	February 25, 2020	Multicast Retrans B added to Appendix A tables
Version 1.0c	April 13, 2020	Clarified VLAN assignments for various access

1. Introduction

1.1 Purpose of this Document

This document provides developers, programmers, analysts, IT Managers, and existing and potential users of the Consolidated Tape System (CTS) and Consolidated Quotation System (CQS) with the necessary information to access and use the CTA Pillar SIP Certification environment. Contained herein:

1. System Description
 2. Connectivity Requirements and Procedures
 3. Operational Guidelines
 4. Testing Guidelines
 5. Contact Information
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1.2 Purpose of CTA Pillar SIP Cert Environment

The CTA Pillar SIP Cert environment is designed to provide an intraday functional test environment for:

- Input Participants (Exchanges)
- Output Subscribers (data recipients)

This includes Input data, Output data, and Retransmissions for:

- CTS
- CQS

The environment is available to Participants and Subscribers for both day-to-day software development testing, as well as one-on-one initial certification testing with the Technology Member Services (TMS) Team.

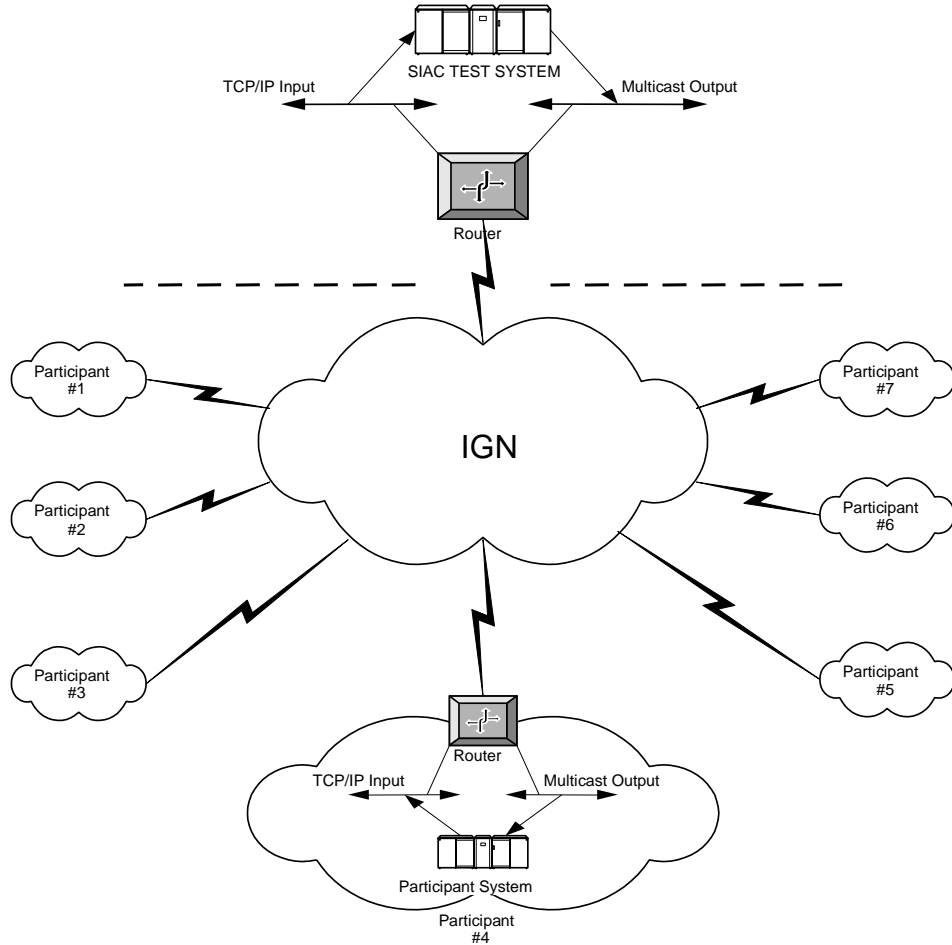
Reference documents, including Input and Output technical specifications, important testing and migration dates, FAQs, and other forms, can be found on the CTA Pillar website: <https://www.ctaplan.com/pillar>

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2. CTA Pillar SIP Cert Environment Setup

CTA Pillar SIP Network Overview

The following diagram illustrates the test system design for CTA Pillar SIP



The Cert environment supports TCP/IP input and IP Multicast output for Participants who want to perform functional testing. There are separate LANS for TCP/IP and IP Multicast. This environment can be expanded to include additional connections for new and existing Participants as needed.

The design of this system is not intended for performance or failure redundancy testing. Retransmission requests in small numbers will be supported.

Each Participant is connected to SIAC via ICE Global Client Networks (IGN; formerly, the Secure Financial Transaction Infrastructure (SFTI)). The input protocol is TCP/IP and the output protocol is IP Multicast.

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3. Procedures to Establish Connectivity

Participants connecting to the test system must support a Transmission Control Protocol / Internet Protocol (TCP/IP) interface on data input to SIAC. In addition, Participants need to have the ability to subscribe to multicast IP groups to receive output data from the SIAC host.

Access to the CTA Pillar SIP Cert environment will require connectivity to:

- VLAN 17 (Participant Input, Participant & Subscriber Retrans Requests)
- VLAN 10 (Multicast & Retrans Output Data)

Below are two ways to facilitate the provisioning request.

1. Submit a request by logging into the [Data Services Dashboard](#) portal. Create an account if you have not been previously registered for access to the Data Services Dashboard portal or contact the ICE Global Networks team at the number or email address listed in the Appendix.
2. Alternatively, you may contact SFTI Client Networks (clientprovisioning@theice.com) for a “Request Service Change”.
3. If you have already made a request to have the input connections provisioned but did not request to have the test data feeds enabled, please submit an email to clientprovisioning@theice.com with the Peering IP of the connection you would like provisioned and the Technical contact to communicate the change on your end.

Note: Be advised that up to ten (10) business days are required to establish connectivity to the service after your request has been accepted by ICE Global Client Networks.

4. To request Cert Input or Retransmission lines, fill out and submit the *CERT CTA Pillar SIP Input and Retransmission Lines Request Form*, located at <https://www.ctaplan.com/pillar>, in the **Forms** section at the bottom. Once submitted, the form will automatically be sent to the Technology Member Services team, who will reply to you with details via e-mail.

There is no charge for application access and usage.
The only associated costs are for IGN network access.

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4. Operational Procedures

4.1 Scope of SIAC Support

The following support is provided for the Participants on the test system:

1. Initial contact for certification and testing-related questions
2. Input Line provisioning
3. Validation of Retransmission requests, if needed

Note: Capacity/Volume testing is *not* supported

4.2 Hours of Operation

The test environment is available on weekdays:

- 1:30am–8:20pm EST
 - 9:00am–5:00pm EST (with support)
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4.3 Participant Testing Requirements/ Guidelines

- Participants should contact Technology Member Services via tms@siac.com for Technology-related inquiries.
- ICE Global Client Networks for network-related troubleshooting, clientnetworks@theice.com.

All contact information can be found in Appendix B below.

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Appendix A: CTA Pillar SIP Cert Input & Output IPs/ports

Rendezvous Points (RP) Addresses

Network Connection	RP ADDRESS - A STREAMS	RP ADDRESS - B STREAMS
NMS Network	159.125.52.194	159.125.52.195
ICE Global Network	198.140.33.2	198.140.33.5

Input Line IP & Port Ranges (Participants [Exchanges] only) - via VLAN 17

Input Line	IP Ranges	Port Ranges
A	198.140.50.0/25	35000-38999
B	198.140.50.128/25	35000-38999

Output Publisher Retransmission & Multicast Channels - via VLAN 17 & VLAN 10 (Output Subscribers)

Retransmission	IP Ranges	Port Ranges
A	198.140.50.0/25	39000-39799
B	198.140.50.128/25	39000-39799

Multicast Line	Source IPs
A	198.140.51.0/25
B	198.140.51.128/25

Tape A		Multicast Channel			Retransmission Channel		
User Type	Symbol Range	Port	Publisher A	Publisher B	Port	Retrans A	Retrans B
CQS	A-G	40001	224.0.91.1	224.0.91.128	41001	224.0.91.32	224.0.91.160
CQS	H-M	40002	224.0.91.2	224.0.91.129	41002	224.0.91.33	224.0.91.161
CQS	N-T	40003	224.0.91.3	224.0.91.130	41003	224.0.91.34	224.0.91.162
CQS	U-Z	40004	224.0.91.4	224.0.91.131	41004	224.0.91.35	224.0.91.163
CTS	A-G	40009	224.0.91.9	224.0.91.136	41009	224.0.91.40	224.0.91.168
CTS	H-M	40010	224.0.91.10	224.0.91.137	41010	224.0.91.41	224.0.91.169
CTS	N-T	40011	224.0.91.11	224.0.91.138	41011	224.0.91.42	224.0.91.170
CTS	U-Z	40012	224.0.91.12	224.0.91.139	41012	224.0.91.43	224.0.91.171

Tape B		Multicast Channel			Retransmission Channel		
User Type	Symbol Range	Port	Publisher A	Publisher B	Port	Retrans A	Retrans B
CQS	A-G	40005	224.0.91.5	224.0.91.132	41005	224.0.91.36	224.0.91.164
CQS	H-M	40006	224.0.91.6	224.0.91.133	41006	224.0.91.37	224.0.91.165
CQS	N-T	40007	224.0.91.7	224.0.91.134	41007	224.0.91.38	224.0.91.166
CQS	U-Z	40008	224.0.91.8	224.0.91.135	41008	224.0.91.39	224.0.91.167
CTS	A-G	40013	224.0.91.13	224.0.91.140	41013	224.0.91.44	224.0.91.172
CTS	H-M	40014	224.0.91.14	224.0.91.141	41014	224.0.91.45	224.0.91.173
CTS	N-T	40015	224.0.91.15	224.0.91.142	41015	224.0.91.46	224.0.91.174
CTS	U-Z	40016	224.0.91.16	224.0.91.143	41016	224.0.91.47	224.0.91.175

Index Feed		Multicast Channel			Retransmission Channel		
User Type	Symbol Range	Port	Publisher A	Publisher B	Port	Retrans A	Retrans B
Index Range	A-M	40017	224.0.91.17	224.0.91.144	41017	224.0.91.48	224.0.91.176
Index Range	N-Z	40018	224.0.91.18	224.0.91.145	41018	224.0.91.49	224.0.91.177

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Appendix B: Contact Information

Name	Phone	E-mail	Functional Area
Technology Member Services	212-896-2825	tms@siac.com	Application/Technical support
Customer Engineering / ICE Global Networks	US +1-212-894-5488 EU +44 (0)207-429-4530	clientprovisioning@theice.com	Network Provisioning
Network Operations 24x7	US +1-770-661-0010 x1 EU +44 (0)203-808-6638 x1 APAC +61-3-8593-5999 x1	clientnetworks@theice.com	Network Support Troubleshooting