Pan-Canadian Projectathon

Connectivity Webinar

01-03-2022

Canada Health Infoway
Inforoute Santé du Canada

Souleymane THIAM – IHE Catalyst

Agenda

- Overview of the registration
- Endpoint configuration in Gazelle Test Management
- Connectivity testing
- Objectives and requirements
- Test process
- Q&A

Overview of the registration

Endpoint configuration in Gazelle Test Management

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CONNECTIVITY TESTS
OBJECTIVES and Requirements

CONNECTIVITY TESTS OBJECTIVES

Online Connectathon : network over internet

- In the objectives of connectivity-tests:
  - Verify if nodes and machines from different test participants can see each other and access ports
  - Verify if firewall configuration does not block access, adjust it eventually
  - Verify DNS registration
- Out of scope o Verify IHE Transaction

CONNECTIVITY TESTS REQUIREMENTS

Pre-requisites

- All Systems up and running on internet with a public IP address
- Must be registered in Gazelle TM
  - All nodes as hosts (FQDN + IP address for each)
  - All Configurations of implemented actors
  - See previous training about Configurations for an online event: https://gazelle.ihe.net/training#ConnectathonTraining

CONNECTIVITY TEST PROCESS

CONNECTIVITY TESTS PROCESS

Process overview

1. Get the host white-list for firewall configuration
2. Get the configuration list to verify
3. Perform connectivity-test on each entry
4. Report connectivity status to the technical manager

- Keep in mind that
  - o The process is driven by operators of initiating actors
  - o Operator of responding actors can also be pro-active and also ask for connectivity-tests to operators of system they would like to test with at the event.

CONNECTIVITY TESTS PROCESS

STEP 1: Get the host white-list for Firewall configuration

- Get the host white-list from Gazelle Test Management

  - Menu Configurations > Network configuration overview, then click on the button Download the hosts file.

  - It will list all nodes that are part of the « online-test-network » for the event.

  - Can be used as data source to configure your firewall

  - Can be used as hosts file in case of DNS delay or issue.

- Update or verify your Firewall configuration

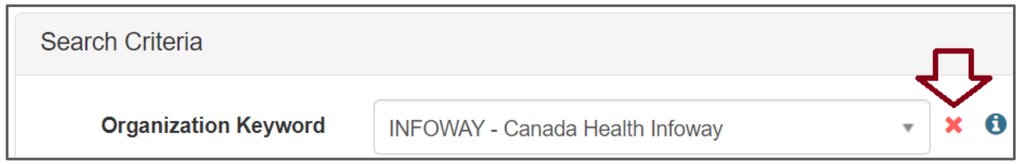
CONNECTIVITY TESTS PROCESS

STEP 2: Get the list of configurations to verify

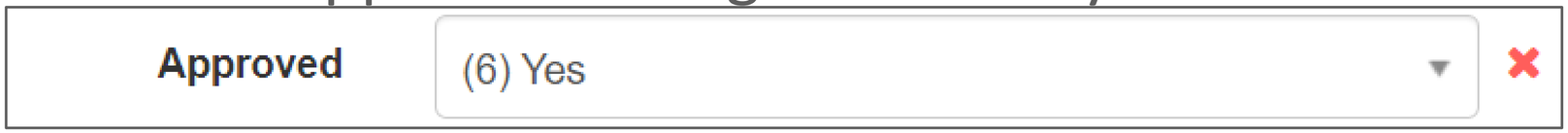
Get the list of all listening actors for the event

o Menu Configurations > All configurations

- Remove the filter on the organization



- Focus on approved configuration only



- Click on the button Download as Excel file.

CONNECTIVITY TESTS PROCESS

- It is recommended to focus on test partners you have identified that will or may be involved in the tests you have to perform

o To see your test plan, go to menu Connectathon > Connectathon > Connectathon (or the shortcut CAT button on the top right)

o Filter the configurations either before or after the excel export

CONNECTIVITY TESTS PROCESS

STEP 2: Warning

- NOTE: If systems have not completed and approved their configuration in Gazelle Test Management, the referential for the connectivity test will be unstable or incomplete.

- If your organization is in this situation, please fix it as soon as possible, otherwise you expose yourself as having no test partners trying to check connectivity with your system ahead of the event.

CONNECTIVITY TESTS PROCESS

STEP 3 : Perform connectivity-tests for each Configuration

- For each entry in the configuration sheet
  - perform a connectivity test from the running system's environment to verify if the described configuration is reachable by your system.
  - test using the IP address
  - test with the host name to also verify DNS resolution
- How ?
  - Either perform a real IHE Transaction
    - no expectation on the functional result at this stage
    - The connection must have been established
  - Either use tools from the machine/environment on which your system is deployed
    - Telnet, nmap, nc, ping (for host), etc.

CONNECTIVITY TESTS PROCESS

STEP 3 : Tips

- IHE Europe has developed a script to help you performing the connectivity-tests: https://gitlab.inria.fr/gazelle/specific-tools/connectivity-test-scripts

o Design to process the Configuration CSV file as input
o Based on nc command, run on Bash, Linux
o May work on Windows Cygwin or Windows-LinuxSubsystem.
o Complete documentation is available in the README

CONNECTIVITY TESTS PROCESS

STEP 4 : Report to the technical management team

- Why ?

o Aggregate test results and share them to the participants

o Give to all a more precise appreciation of other issues faced

  - the overall network status
  - Identify issue patterns

- Technical management can arbitrate on connectivity conflicts

CONNECTIVITY TESTS PROCESS

STEP 4 : Report to the technical management team The connectivity script is able to generate this output for you

- Report your connectivity results to the technical management team: canadian-pat-manager@ihe-catalyst.net

o One file per initiating system, list all test entries with result PASSED or FAILED for both
  - Testing against the IP address
  - Testing against the host name
- Reuse the Excel/CSV file from Gazelle Configuration

o Add columns: “IP test result” and “Host test result” for each entry you have tested
o Remove lines that were not of interest to you

Questions

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