**MAMPUlator (NetworkGPT) Test Cases**

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| Revision: | 1 | Author: | Rohan Dev | Date: |  |
| Devices: | Mampulator Webex Chatbot | | | | |
| Test Title: | Query for Campus Information | | | | |
| Test Purpose: | Check that chatbot is retrieving information from DNA Center (DNAC), cleaning the information base, and wrapping the output in a human-readable way. | | | | |
| Test Setup: | 1. DNAC nodes are online, and reachable from Mampulator VM. 2. There is outbound Internet connectivity from Mampulator VM for reachability to OpenAI and Webex servers. 3. Mampulator program is executed. | | | | |
| Procedure: | 1. Execute Mampulator program. 2. Ask questions on the ‘Mampulator’ Webex bot space about the campus. 3. User can query for information/statistics comprising the following (but not limited to: CPU utilization, memory utilization, interface health, device neighborship, interface status and configured MTU/speed, reachability status, software type/version, hostname, etc.) | | | | |
| Verify the expected results match the actual results. | | | | Pass:  Fail: | |
| Expected Results: | Mampulator outputs results that answers the user question exactly and formats response based on the user’s ask. | | | | |
| Passed: (initial) |  | | | | |
| Failed: (initial) |  | | | | |
| Reason for Failure: |  | | | | |
| Remarks: |  | | | | |

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| Revision: | 1 | Author: | Rohan Dev | Date: |  |
| Devices: | Mampulator Webex Chatbot | | | | |
| Test Title: | Query for AAA Server Information | | | | |
| Test Purpose: | Check that chatbot is retrieving information from Cisco ISE, cleaning the information base, and wrapping the output in a human-readable way. | | | | |
| Test Setup: | 1. ISE nodes are online, and reachable from Mampulator VM. 2. There is outbound Internet connectivity from Mampulator VM for reachability to OpenAI and Webex servers. 3. Mampulator program is executed. | | | | |
| Procedure: | 1. Execute Mampulator program. 2. Ask questions on the ‘Mampulator’ Webex bot space about the AAA policies. 3. User can query for information/statistics comprising the following (but not limited to: authentication/authorization policy name, state, number of hits, identity sources, conditions, profile names, security group tags (SGTs), etc.) | | | | |
| Verify the expected results match the actual results. | | | | Pass:  Fail: | |
| Expected Results: | Mampulator outputs results that answers the user question exactly and formats response based on the user’s ask. | | | | |
| Passed: (initial) |  | | | | |
| Failed: (initial) |  | | | | |
| Reason for Failure: |  | | | | |
| Remarks: |  | | | | |

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| Revision: | 1 | Author: | Rohan Dev | Date: |  |
| Devices: | Mampulator Webex Chatbot | | | | |
| Test Title: | Query for Unavailable Information | | | | |
| Test Purpose: | Check that chatbot is retrieving information from Cisco DNAC and ISE, cleaning the information base, and wrapping the output in a human-readable way. If a user makes a query that is irrelevant to the MAMPU network environment, Mampulator will not produce a fictitious response. | | | | |
| Test Setup: | 1. DNAC and ISE nodes are online, and reachable from Mampulator VM. 2. There is outbound Internet connectivity from Mampulator VM for reachability to OpenAI and Webex servers. 3. Mampulator program is executed. | | | | |
| Procedure: | 1. Execute Mampulator program. 2. Ask questions on the ‘Mampulator’ Webex bot space about anything inside or outside the MAMPU network infrastructure environment. | | | | |
| Verify the expected results match the actual results. | | | | Pass:  Fail: | |
| Expected Results: | Mampulator makes 1 of 2 determinations: 1. If user asks questions about MAMPU’s environment, but the information is unavailable in Mampulator’s information base, the chatbot will respond that it does not have access to the information that the user is asking for (e.g., how many devices are there inside MAMPU’s SDWAN fabric?).  2. If user asks questions outside of MAMPU’s environment, and the answer can be queried from OpenAI’s pretrained Google database, Mampulator will answer the question accordingly (e.g., how is the weather in KL?) | | | | |
| Passed: (initial) |  | | | | |
| Failed: (initial) |  | | | | |
| Reason for Failure: |  | | | | |
| Remarks: |  | | | | |