**CACIE Tool #NN** – ***Inactive Node Checker***

**Version** **1.0**

**QA**: **TEST** or **NA** or **QA**

1. **Description and Purpose**

One or two paragraphs describing the tool’s function and purpose.

The Inactive Node Check tool reads in a STOMP model input.zone file and generates an output file that summarizes the number of active and inactive nodes in the top 5 layers of the STOMP model domain.

1. **Functional Requirements**

The functional requirements of the tool will be documented in this section. Each requirement will have an ID, such as: FR-N, where N starts at 1 and increments for each Functional Requirement. Each of the Functional Requirement IDs will have a corresponding test ID listed in the RTM.

FR-1: Read in input.zone file

FR-2:

FR-3:

FR-4:

FR-5: Generate output file

1. **Software Requirements Specifications**

The software requirements specification of the tool will be documented in this section.

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1. **Software Design Description**

The software design description of the tool will be documented in this section. The results of a Code Walkthrough with an independent third party will be summarized in this section.

1. **Requirements Traceability Matrix**

A requirements traceability matrix for the tool will be documented in this section. At a minimum, the matrix will include IDs of: Functional Requirements and the corresponding Acceptance Test, along with an indication of the test result (Pass/Fail).

The requirements traceability matrix for the Inactive Node Checker tool is presented in Table 1.

| **Table 1. Inactive Node Checker Tool Requirements Traceability Matrix** | | |
| --- | --- | --- |
| **Functional Requirement ID** | **Acceptance Test ID** | **Test Case** |
| QA Level | IT-1 | Installation Test |
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1. **Test Plan and Cases**

The test plan for the tool will be documented in this section. Each test will have a unique ID and criteria for determining if the test result is pass or fail. The TEST ID will be referenced in the RTM and ATR. An installation test, labeled **IT-1**, will be used by the Tool Runner to confirm the version of the tool being used is running correctly before launching it with the user’s parameters.

The Unit Testing done on the tool will be documented here, also.

The test plan for the Inactive Node Checker tool is presented in Table 2.

| **Table 2. Inactive Node Checker Tool Test Plan** | | |
| --- | --- | --- |
| **TEST ID** | **Test Case** | **Test Result  (Pass/Fail)** |
| *Note [Testing\_Directory] in acceptance test report* | | |
| IT-1 | *Navigate to [Testing\_Directory]\fingerprint\_test* | |
| *Invoke Tool Runner and* Inactive Node Checker *tool using runner\_ITC-1.sh by entering the following at the command line:./runner\_ITC-1.sh* | |
| Verify Tool Runner is invoked and executes |  |
| Verify Inactive Node Checker tool executes |  |
| *Navigate to [Testing\_Directory].* | | |
| ATC-1 |  | |
|  |  |
| ATC-2 |  | |
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| ATC-3 |  | |
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| ATC-4 |  | |
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| ATC-5 |  | |
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| ATC-6 |  | |
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1. **Acceptance Test Report**

The test report will state whether the tool is qualified for use, summarize test case results, and report all resolved incidents and resolution of unresolved incidents.

1. **User Guide**

A guide for using the tool will be documented in this section.