

VSAT 22.0 Release Notes

This document summarizes the new features and enhancements available in VSAT version 22.0. All changes included are from VSAT version 21.0. For more details on these changes, please refer to VSAT manuals.

1. Cascading Analysis

- Node-breaker topology is supported in Cascading Analysis

2. Contingency

- Support 'Turn off/on fixed shunt' contingency type
- In 'Change 3w-transformer status' contingency type, support 3 new statuses:
Primary / Secondary / Tertiary bus out

3. Special Protection Scheme (SPS)

- New generator conditions added:
 - Generator Maximum MW
 - Generator Maximum MW of Subsystem
 - Generator Minimum MW
 - Generator Minimum MW of Subsystem
 - Generator Reserved MW
 - Generator Reserved MW of Subsystem
- Added a new 'Bus Angle Degree' condition
- Support new 'Change 3w-transformer status' action type

4. Monitor

- Support Short Circuit Ratio (SCR), Short Circuit MVA (SCMVA), and bus reactance to resistance (XR) ratio monitor types
- Support monitoring voltage pu/kV/angle of nodes
- Support monitoring electrical distance between buses

5. Criteria

- Support Short Circuit Ratio (SCR) criteria
- Support 'include/exclude node' in voltage criteria

6. Transfer

- Support 'dependency checking' for generation schedule group, DC converter and phase shifter participation

7. Others

- Support saving node-breaker XML data file when saving powerflows
- Added a new VSAT parameter 'Admittance Matrix Singularity Threshold'
- Contingency Converter, added support for more MUST commands