



**SMART Communications, Inc.**, New York, is an AI boutique that specializes in language Simplification and Natural Language Programming (NLP).

The SMART team is a group of experienced developers dedicated to linguistic software that uses Artificial Intelligence (AI) for technical publishing. Our tools are designed to help technical writers and engineers write clear, simple, concise **Controlled English** for procedural documentation used in 149 countries.

### Applied Artificial Intelligence

The SMART team includes data scientists experienced with text analysis. The **MAXit Checker** has 19,000+ agentic AI rules to analyze the *meaning and intent* of the text and guide the technical writers.

The SMART team has successfully applied Controlled English to products that range from a silicon wafer chip to a 290-ton autonomous mining machine.

Other uses of Controlled English are software documentation for air taxis, autonomous vehicles, IoT, predictive maintenance, quality control and robotics.

### How the MAXit Checker Works

The next page shows a telephony text checked by **MAXit for FrameMaker**. The colors indicate errors and curated suggestions from 40 message classes.

The **MAXit Checker for Adobe FrameMaker** has 19,000+ agentic AI rules for grammar, style and syntax. Adobe FrameMaker has functions for book building and publishing in multiple formats.

### Telecommunications Dictionary

The SMART team uses the SMART Text Miner software and linguistic analysis to develop custom dictionaries. The SMART telephony dictionary includes standard telephony terms and abbreviations from Newton's Telecom Dictionary and 5G ITU standards.

The electronic distribution of information is simplified in a DITA format with tools like Adobe FrameMaker. The simplified writing style, grammar rules and standardized vocabulary make English easy to read for Limited English Proficiency (LEP) users. The benefits are improved customer satisfaction and avoidance of human and procedural errors.

The **MAXit Checker** software includes functions to create Six Sigma and readability reports. These statistics guide the writers to best practices for quality documentation and readability.

The objective of Controlled English is to make information easy to read, understand and translate.

### Easy steps to Implement Controlled English

- **SMART Text Miner** software quickly discovers the terminology. The text mining reports supply the analytics to create the custom technical dictionaries for the MAXit Checker.
- **SMART Lexicon Manager** software maintains and manages the terminology in the custom dictionaries.
- **SMART Trainers** provide on-line or instructor-led writer training to teach writers the techniques to write in Controlled English.
- **SMART MAXit Checker** software guides the writers with suggestions and corrections to write in **Controlled English**.
- **SMART team** offers consulting services to determine where to implement **Controlled English** for better global communications.



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Telecommunications  
SATCOM and Space

## Nortel Standard English (NSE)

Canada's Nortel Networks was a leading supplier of telecommunications equipment to global telephony companies. When they needed a better method to communicate they selected SMART Communications, Inc., to adapt the ASD-STE100 Simplified Technical English from aerospace for the growing 5G telephony market.

Ed Deveau, Director of Documentation at Nortel said, "The use of a standardized English reduced procedural errors by 42%. NSE proved beneficial for compliance to Canada's language laws. The language simplification with NSE decreased technical training time and improved customer response time."

NOTE: Nortel Networks was acquired by Ericsson.

## Original Nortel Text

Telecom Networks



### Customer Service Bulletin

#### Problem Description:

The discovery of a network comprising of (v3.2.2, v3.2.2.2, v3.2.3 and v3.3), several Forwarding Data Base containing several causes Optivity Network Management System Subnet Discovery Process (Topst) to use CPU and take an excessive time to complete.

Enhancements to the PP86xx agent beginning for VLAN management caused ONMS Display this behavior. Current scope of problem is PP86xx v3.3.3 and subsequent versions.

#### Discussion:

Prior to PP86xx agent queries would return with just the MAC addresses learnt on each specific VLAN within the community string of the SNMP query. Current ONMS Subnet Discovery and topology mapping is based upon this implementation.

Enhancements were done in the PP 86xx 3.2.2.2 agent allowing forwarding (FDB) table to show the forwarding information for all VLANs without the need of hard-coding the VLAN ID. Absence of VLAN tag impacts ONMS Subnet discovery and hence the resulting behavior. Note: v3.2.2.0 of the PP86xx agent loops on a request for a specific mib variable (dot1dTpFdbAddress) which can cause the (ONMS) discovery process to take an excessive time to complete. The behavior was rectified in v3.2.2.2 and above.

#### Resolution:

Optivity NMS addressed this problem via a Software fix that was made available in early Q 1 2003. This fix is included in ONMS 10.1. Please note that this fix requires PP86xx agent version 3.2.2.2 and later.

Clarify Reference CR: Qxxxxx96

Note: The sample was analyzed by MAXit in Adobe FrameMaker 2022. Each color represents an error or shows a correction. The writer clicks to edit in place.

## Rewrite: Nortel Standard English

### Subject:

Cause of a slow response time from the discovery of subnets on Optivity Network Management Systems (ONMS). The problem occurs on networks with two or more PP8600s or VLANs.

### Description:

How to adjust the response time during the discovery of subnets on networks that have two or more PP8600s or VLANs. A Forwarding Data Base (FDB) on the ONMS, with more than 2000 entries, has a slower response time. The cause of the problem is a 100% load on the CPU.

The problem only occurs in the PP86xx agents, versions V3.2.2.2 and V3.3.3.0.

### Solution:

A software patch for the ONMS was included in version 10.1. Before you install the software patch, make sure that the PP86xx agents are at versions V3.2.2.2 to V3.3.3.0 or higher.

### Discussion:

In older PP86xx versions, prompts showed the MAC addresses for each VLAN in the SNMP prompt text. The new ONMS subnet discovery tool uses the same method and mapping.

In PP86xx agents, version 3.3.2.2, the call forwarding table (FDB) shows information for all VLANs without the need to enter a VLAN ID.

NOTE: PP8xx agents can make a request for a mib variable, which causes increased response time from the ONMS. This problem is corrected in versions higher than V3.2.2.2.

### Resolution:

An Optivity software release corrected this problem. The correction is in ONMS 10.1. PP86xx version 3.2.2.2 and higher.