

AISEP Certificate Extension Program



Certificate Extension Report

Tenix Defence Systems
Interactive Link Version 3.0

Version	4.0
Date	August 2006

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1 Executive Summary

Interactive Link (IL) is a product developed by Tenix Defence to allow for two networks of different classifications to be operated from the one keyboard and mouse, with no risk of compromising the confidentiality of the data on the more highly classified network. The IL consists of two separate trusted hardware components, Interactive Link Data Diode Device (IL-DDD) and Interactive Link Keyboard Switch (IL-KBS). The IL-DDD allows data to be passed from the Low Side Network (LSN) to the High Side Network (HSN) while not allowing data to pass back the other way. This preserves the confidentiality of the data on the HSN while still allowing users to access data on both networks. The IL-KBS is used to allow for the control of both of the networks from the one mouse and keyboard and to allow the output of both networks to be displayed simultaneously on the one monitor.

The IL Version 3.0 (Release 3.0.1) was evaluated in accordance with the rules of the Australasian Information Security Evaluation Program (AISEP). In March 2000, the Australasian Certification Authority (ACA) issued certificate number 2000/12 certifying that IL Version 3.0 had met the ITSEC Assurance Level E6.

This report describes the Australasian Certificate Extension (ACE) approved changes that have been made to the evaluated version of IL (Version 3.0), and lists the subsequent ACE approved versions of IL.

For each change that is outlined in this report, ACE deliverables have been required to demonstrate that previous evaluation results remain valid. ACE approval signifies that the assurance gained from the most recent evaluation has been maintained.

This report concludes that the following versions of IL have maintained the ITSEC E6 level of assurance.

- Version 3.0 Release 3.0.2
- Version 4.0 Release 4.0.0
- Version 4.0 Release 4.0.1
- Version 4.1 Release 4.1.0
- Version 4.1 Release 4.1.1
- Version 4.1 Release 4.1.2
- Version 5.0 Release 5.0.0
- Version 5.1 Release 5.1.0
- Version 5.1 Release 5.1.1
- Version 5.2 Release 5.2.0

2 Introduction

This report describes the AISEP Certificate Extension (ACE) approved changes that have been made to Interactive Link Version 3.0, and lists the subsequent ACE approved versions of it. The report is aimed at users of the certified Interactive Link product. Also outlined are relevant configuration and installation guidelines that should be followed in order for the certified product to remain in an approved configuration. It is assumed that the reader is familiar with the Interactive Link Version 3.0 Certification Report, Issue 1.0, March 2000.

2.1 ACE Program

The ACE program is aimed at assuring that a certified product will continue to meet its Security Target (ST) as changes are made to the certified product or its environment. Such changes include the discovery of new vulnerabilities, changes in user requirements, the correction of flaws found in the certified product and updates to functionality. For each change that is outlined in this report, ACE deliverables have been required to demonstrate that the results established during the original evaluation remain valid.

2.2 ACE Approval

It is important to note that those versions of Interactive Link appearing as ACE approved in this report have not been evaluated. ACE approval signifies that the assurance gained from the initial evaluation has been maintained throughout the versions and releases identified in this report.

The versions of Interactive Link, approved by the ACE Program can therefore be used with the same level of confidence in security as the original evaluated version. The listed versions can also be used in place of any previously evaluated version of Interactive Link and are covered by the rights and privileges conferred by the original certification.

3 Identification

Table 3.1 below provides information about the certified Target of Evaluation (TOE).

	Details
TOE	Interactive Link (IL) Version 3.0 (Release 3.0.1)
Certificate Number	2000/12
Security Target	Issue 6.0 1 st March 2000
Assurance Level	ITSEC E6

Table 3.1 TOE Identification

4 Change Register

The changes shown in Table 4.1 below have been ACE approved.

	Part Number	Version	Release	Details
Change 1	NIM001	3.0	3.0.2	In both KBS and DDD: Power supplies replaced, minor changes to documentation, aesthetic changes to the product casing and bug fix for IL software installation. KBS specific: Administrator Pack changed.
Change 2	NIM001	4.0	4.0.0	All references to 'Vision Abell' changed to 'Tenix Defence'.
Change 3	NIM001	4.0	4.0.1	Minor documentation changes to reflect documentation standards and to correct typographical errors. New KBS Version that does not contain the fibre components as was in previous versions. Documentation also updated to reflect this.
Change 4	NIM001	4.1	4.1.0	In the DDD, two connectors used have become superseded and consequently replaced. An effect of this was that the case had to be slightly altered. All references to the superseded parts have been modified to reflect the change. In the KBS, some small changes have been made and all documentation has been updated to reflect this.

Change 5	NIM001	4.1	4.1.1	Updates UNB install scripts and application of cosmetic changes to UNB and IL Administrator Manuals.
Change 6	NIM001	4.1	4.1.2	Updates to TCX and UNB software installation CDs to correct failures discovered in Factory Acceptance Testing. Update labelling on release CDs. Update TCX server and UNB Installation and Administration guides.
Change 7	NIM001	5.0	5.0.0	All components USA/AU Shippable. Reflected in documentation. VETO TCX component added to IL-X.
Change 8	NIM001	5.1	5.1.0	No longer a 30-user limit. Software and documentation have changed to reflect this.
Change 9	NIM001	5.1	5.1.1	Update of IL approved sources listing and configured items list.
Change 10	NIM001	5.2	5.2.0	Change in PCB component manufacturer's names and/or part numbers, software enhancements, and improvements to user guide.

Table 4.1 Change Register

4.1 Change 1

Interactive Link Version 3.0, Release 3.0.2

The changes included in this release were based on Interactive Link Version 3.0. The changes made do not affect the functionality and security of Interactive Link and are as follows:

- Small aesthetical changes including changes to artwork and labels on the cases.
- Addition of parts to the Parts List, as well as minor changes to the Parts List including typographical changes.
- Minor changes to guidance documentation including the fixing of typographical errors.
- The two pin plug pack has been replaced by a three pin power pack for both the IL-DDD and IL-KBS. The power supply is used to provide 5VDC to each of the units.
- Administration pack for the IL-KBS has now been sealed in a plastic bag with an ancillary software CD and boot floppy added.

4.2 Change 2

Interactive Link Version 4.0, Release 4.0.0

The changes included in this release were based on Interactive Link Version 3.0 Release 3.0.2. The changes made do not affect the functionality and security of Interactive Link and are as follows:

- All references to ‘Vision Abell Pty Ltd’ in all documents and all labels were changed from ‘Vision Abell Pty Ltd’ to ‘Tenix Defence’.

4.3 Change 3

Interactive Link Version 4.0, Release 4.0.1

The changes included in this release were based on Interactive Link 4.0 Release 4.0.0. The changes made do not affect the functionality and security of Interactive Link and are as follows:

- Updated documentation to correct minor errors and incorporate Tenix documentation standards.
- Minor aesthetical changes to the IL-DDD case.
- Two different types of IL-KBS created for this change, one that does still contain the 10BASE-FL connector on the rear of the IL-KBS, and one that doesn't.

The different types involved the removal of the 10BASE-FL fibre optic connection functionality from the rear of the case of the IL-KBS (The 10BASE-T connector remains). The rear plate has been changed to cover the

hole left by the removal of the connector, as has associated documentation. These changes do not affect security functionality of either the IL-KBS or the IL-DDD.

The Version and Release numbers are the same for both types; the one without the 10BASE-FL connection and the one that does still contain it.

4.4 Change 4

Interactive Link Version 4.1, Release 4.1.0

The changes included in this release were based on Interactive Link Version 4.0 Release 4.0.1. The changes made do not affect the functionality or security of Interactive Link and are as follows:

- In the IL-DDD, the fibre optic connectors HFBR-11E5 and HFBR-21E5 have become superseded by HBFR-1115T and HFBR-2115T respectively and have consequently been replaced by the new connectors. The only physical difference between the old and replacement connectors is the shape of the plug. There are no functionality changes associated with this update. The changes to support the connector replacement are demonstrated in the following points.
- The IL-DDD front panel has been modified to have round holes instead of the previous rectangular holes to accommodate the updated connectors. All references in the documentation to the fibre optic connectors have been updated to reflect this change.
- In all documentation for Interactive Link, all references to “IL Software” or “IL S/W” have been replaced with “TCX Software” or “TCX S/W.” The File Transfer (FT) functionality has been removed from the TCX Software.
- References to the four-server configuration have been removed from all relevant documentation.

4.5 Change 5

Interactive Link Version 4.1, Release 4.1.1

- The changes included in this release were based on Interactive Link Version 4.0 Release 4.1.0. The changes made do not affect the functionality or security of Interactive Link and are as follows: The Unidirectional Network Bridge (UNB) install scripts have been upgraded, being a peripheral support software change to the UNB, which is both functionally and architecturally transparent with respect to system security.
- Changes made to the IL Administrator Guide, which involve cosmetic changes and the addition of a Canadian compliance message. Changes to the Administrator Guide also reflect the variants of DDD and MCS, which differ only in the power cords they are shipped with. That is, AU units contain AU power cords and US units contain US power cords.

- New compliance labels have been added to the rear decal of the IL-KBS.

4.6 Change 6

Interactive Link Version 4.1, Release 4.1.2

The changes included in this release were based on Interactive Link Version 4.1 Release 4.1.1. The changes made do not affect the functionality or security of Interactive Link and are as follows:

- The TCX and UNB software installation CDs have been updated to correct failures discovered in Factory Acceptance Testing.
- Release CDs include an update to labelling.
- The TCX server and UNB Installation and Administration guides have been updated.

4.7 Change 7

Interactive Link Version 5.0, Release 5.0.0

The changes included in this release were based on Interactive Link Version 4.1 Release 4.1.2. The changes made do not affect the functionality or security of Interactive Link and are as follows:

- All IL-X Shippable documents have been updated to say “USA/AU Shippable” unit, to reflect the inclusion of USA/AU power cords in every unit. All devices are now packaged in the same way, with no product variants existing for different countries.
- The IL-KBS (T) and IL-KBS (T/FL) have had an increase in Release numbers to 2.0.4 and 6.0.4 respectively. This is to reflect the addition of USA/AU power cords and to distinguish it, via labels and documentation, from the VETO variant (below).
- The introduction of the new product variant, part number FID102, VETO TCX (T) v1.0.0. The VETO TCX (T) is identical in form to the IL-KBS (T) in every way except that it is branded differently, and security remains unchanged from the original Interactive Link evaluation at ITSEC E6.

4.8 Change 8

Interactive Link Version 5.1, Release 5.1.0

The changes included in this release were based on Interactive Link Version 5.0 Release 5.1.0. The changes made do not affect the functionality or security of Interactive Link and are as follows:

- The user limit of 30 has been removed to allow “unlimited” users of the system simultaneously. Associated software and documentation has been updated to permit/reflect this.

4.9 Change 9

Interactive Link Version 5.1, Release 5.1.1

The changes included in this release were based on Interactive Link Version 5.0 Release 5.1.0. The changes made do not affect the functionality or security of Interactive Link and are as follows:

- Changes to the use of functionally equivalent electronic components, the change to some part numbers and the deletion of parts that have become obsolete.
- Changes to documentation for the IL-X reflecting above changes.

4.10 Change 10

Interactive Link Version 5.2, Release 5.2.0

The changes included in this release were based on Interactive Link Version 5.0 Release 5.1.1. The changes made do not affect the functionality or security of Interactive Link and are as follows:

- Updates to electronic component manufacturer's names, part numbers or the addition of functionally equivalent components
- Fixes for minor bugs in the Unidirectional Network Bridge (UNB) and ILX Server software (and associated document updates)
- Creation of drawing and parts lists to improve software assembly procedure
- Addition of ILX server software functionality to improve compatibility with Sun terminals
- Change of title of TCX server software to ILX server software (and associated document updates)
- Correction of error on IL Front Panel Printed Board Drawing
- Change configuration management plan to re-introduce Engineering Change Orders to allow improved change management process.
- Changes to production documentation for the IL-X.

5 Configuration

This chapter is used to provide guidance on any configuration options affected by ACE approved changes and provides information on how to identify each different version and release.

5.1 TOE Identification

Table 5.1 can be consulted in order to identify the version of an Interactive Link system. The table lists the components that make up a specific version of the Interactive Link system (IL-X). Users of the IL-X should consult Tenix Datagate (<http://www.tenixdatagate.com>) and the Defence Signals Directorate (<http://www.dsd.gov.au/>) if deploying a system that does not consist of the configurations described in Table 5.1.

Component	Part Number	Release Numbers										
		3.0.1	3.0.2	4.0.0	4.0.1	4.1.0	4.1.1	4.1.2	5.0.0	5.1.0	5.1.1	5.2.0
IL-X	NIM001	3.0.1	3.0.2	4.0.0	4.0.1	4.1.0	4.1.1	4.1.2	5.0.0	5.1.0	5.1.1	5.2.0
IL-KBS (Base-T/-FL)	FID001	5.0.0	-	6.0.0	6.0.1	-	6.0.2	6.0.3	6.0.4	-	6.0.5	6.0.6
IL-KBS (Base-T)	FID002	-	-	-	2.0.0	-	2.0.1	2.0.2	2.0.3	2.1.0	2.1.1	2.1.2
VETO TCX	FID102	-	-	-	-	-	-	-	1.0.0	-	1.0.1	1.0.2
IL-DDD	FID003	1.2.1	1.2.2	2.0.0	2.0.1	2.1.0	2.1.1	2.1.3	2.1.4	-	-	2.1.5
VETO DD	FID103	-	-	-	-	-	-	1.0.0	1.0.1	-	-	1.0.2
IL Software	FIS001	2.0.1	2.0.1	3.0.0	-	3.1.0	3.2.0	3.2.1	-	3.3.0		3.4.0

Table 5.1: IL-X Components

For example, the IL-X version 3.0.1 is made up of the IL-KBS 5.0.0 the IL-DDD 1.2.1 and IL Software 2.0.1.

For hardware devices (IL-KBS and IL-DDD) an inspection of the rear panel of the unit can identify the part number, version, and release of that particular Interactive Link unit. The version, part number and release are listed in the “Model – Build No:” panel in the top left-hand corner of the rear panel. The part and version numbers are listed in the following format:

FIDPPP-V.V.R

Where PPP = Part Number,

V.V = Version Number, and

R = Release Number

Note: If there is no release number, then it is the initial release (release 0) for that version.

For the IL Software, the release number is clearly marked on the software CDs.

6 Conclusion

The Australasian Certification Authority has determined that the changes made to Interactive Link Version 3.0 identified as ACE approved in this report have met the requirements for the ACE program.

These ACE approved versions of Interactive Link should only be used in accordance with all recommendations and guidelines as set out in this report and the Interactive Link Version 3.0 Certification Report.

7 Document History

Version	Details	Date
1.0	Release for EPL	February 04
1.1	Change 5	March 04
2.0	VETO Release, unlimited users permissible	June 04
3.0	Part Changes	December 05
4.0	Part changes and software enhancements	August 06