Tasmanian Government

IPv6 Procurement and Audit Standard

Version 1.1 – 7 January 2010

Tasmania

Explore the possibilities

1   Introduction

The Tasmanian Government IPv6 Procurement and Audit Standard is to assist achieving a smooth transition by the Tasmanian Government from use of Internet Protocol version 4 (IPv4) to Internet Protocol version 6 (IPv6). The standard has been developed as part of the Interoperability Program of the Office of eGovernment within the Department of Premier and Cabinet (formerly the Inter Agency Policy and Projects Unit).

The aim of the Interoperability Program is to improve whole-of-government efficiency, effectiveness, and agility. The use of common standards and guidelines is one way to build the capacity for interoperability between agencies. Interoperability standards and guidelines are developed in consultation with stakeholders, generally from Tasmanian Government agencies.

This standard was prepared with input from the Tasmanian Government IT Managers Group, TMD and the Australian Government Information Management Office (AGIMO).

Maintenance and review of this document is co-ordinated by the Office of eGovernment, Department of Premier and Cabinet.

1.1   Authority and history

The Tasmanian Government IPv6 Procurement and Audit Standard was approved for use in Tasmanian Government agencies by the Tasmanian Government's Inter Agency Steering Committee (IASC) on 9 November 2009

1.2   Background

The Tasmanian Government IPv6 Transition Strategy[1] was approved by the Inter Agency Steering Committee (IASC) in April 2009. This standard is to progress the vision of the Strategy which is to:

- Assist agencies to plan for the implementation of IPv6
- Minimise the risks to government during the transition to IPv6
- Optimise development of skills in IPv6 technology
- Maximise opportunities for more effective and efficient service delivery using IPv6

The Tasmanian Government IPv6 Transition Strategy includes:

1. Endorse the IPv6 standards by the IASC
2. Endorse the IPv6 standards by the agencies
3. Continue raising awareness and visibility of the IPv6 issue
4. Undertake regular IPv6 compliant audits of ICT Assets
5. Ensure formal IPv6 procurement standards for ICT Assets are developed
6. Develop dual stack (IPv4 and IPv6) test lab
7. Suggest purchasing some IPv6 licenses now for test site / lab
8. Ensure government organisations gain experience with IPv6 technologies including Gateways and Tunnelling
9. Test as many applications on the IPv6 platform at the appropriate time

This standard progresses elements 1, 2, 4, and 5 of the strategy.

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1 The Strategy can be found at www.egovernment.tas.gov.au under current activities.

1.3   Purpose of the standard

This standard provides for a consistent whole of government approach for the transition of the Tasmanian Government from IPv4 based[2] to IPv6 capable assets. The standard provides guidance on:

- Procurement of new IPv6 Capable[3] ICT Assets;
- Regular identification, status and recording of the IPv6 ICT Assets in agency ICT assets registries

The standard supports the Tasmanian Government IPv6 Transition Strategy. The Strategy assists agencies to plan for the implementation of IPv6, minimise the risks to government during the transition to IPv6, optimise the development of skills in IPv6 technology and to maximise opportunities for more effective and efficient service delivery using IPv6. Adoption of the standard will assist agencies to avoid potential shortfall of IP address, avoid issues in remaining on IPv4 infrastructure, take advantages of the benefits of IPv6 infrastructure and participate in the implementation of multi-agency and whole-of-government IT applications and services more effectively.

It is expected this standard will be extended, including an existing / legacy ICT asset standard to ensure that all existing / legacy ICT assets in agency inventories will be IPv6 Capable by 30 June 2014.

1.4   Access to the standard

Elements of the standard are detailed in section 2 below:

1.   IPv6 ICT asset procurement
2.   IPv6 ICT asset audit

This document can be found at www.egovernment.tas.gov.au

1.5   Intended audience

The Tasmanian Government IPv6 Procurement and Audit Standard applies to Tasmanian Government departments and agencies as listed in Division 1 of Part 1 of Schedule 1 of the *Tasmanian State Service Act 2000.*

All ICT Managers, ICT Administrators, ICT Systems Officers, ICT Networking Officers, ICT Infrastructure Officers and ICT Procurement Officers are expected to understand the principles contained within the standard and implement the requirements of the standard wherever applicable.

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2   ICT Asset is defined as any ICT system, application, equipment, peripheral, service contract or infrastructure

3   "IPv6 'capable' is defined as a system or product capable of receiving, processing and forwarding IPv6 packets and / or interfacing with other systems and protocols in a manner similar to IPv4. Criteria to be considered IPv6 capable are: conformant with the IPv6 standards profile contained in the United States Department of Defence IT Standards Registry (DISR) (a US publications as no publication currently exists within the Australian Defence Force; maintaining interoperability in heterogeneous environments with IPv4; commitment to up-grade as the IPv6 standard evolves; and availability of contractor/vendor IPv6 technical support."

1.6   Review of the Standard

Review of the Tasmanian Government IPv6 Procurement and Audit Standard is co-ordinated by the Office of eGovernment.

1.7   Feedback and assistance

The Office of eGovernment welcomes feedback on the use of these standards. Please direct your feedback and enquiries to:

> The Interoperability Program
> Office of eGovernment
> Department of Premier and Cabinet
> Ph: 03 6232 7722 or email: egovernment@dpac.tas.gov.au

Refer to www.egovernment.tas.gov.au for further information on Interoperability and other standards and guidelines.

2   IPv6 Procurement and Audit Standard

2.1   IPv6 ICT asset procurement

Standard	Agencies will ensure that all **new** ICT Assets, with and expected life beyond 30 June 2014, are IPv6 Capable by 30 June 2014 (see definition).
Goal	To enable Agencies to achieve a smooth transition by the Tasmanian Government from use of Internet Protocol version 4 (IPv4) to IPv6.
Definition - ICT Asset	ICT Asset is defined as any ICT system, application, equipment, peripheral, service contract or infrastructure
Definition – IPv6 Capable	"IPv6 'capable' is defined as a system or product capable of receiving, processing and forwarding IPv6 packets and/or interfacing with other systems and protocols in a manner similar to IPv4. Criteria to be considered IPv6 capable are: conformant with the IPv6 standards profile contained in the United States Department of Defence IT Standards Registry (DISR) (a US publication as no publication currently exists within the Australian Defence Force); maintaining interoperability in heterogeneous environments with IPv4; commitment to up-grade as the IPv6 standard evolves; and availability of contractor/vendor IPv6 technical support."
Definition – IPv6 Native	IPv6 'native' is defined as a system or product capable of receiving, processing and forwarding IPv6 packets and / or interfacing with other systems and protocols only.

Performance Measurements

Output	Measurement
Achieve100% of all ICT Assets in the Tasmanian Government network are dual IPv4/IPv6 compliant	Measured by a regular IPv6 compliance survey of agencies
Achieve 100% of all ICT Assets procurement request for ICT are dual IPv4/IPv6 compliant	Measured by reviewing the Tasmanian Government Tender Website

2.2   IPv6 ICT asset audit

Standard	Agencies will ensure that IPv6 compliance is identified and recorded in ICT asset registers for all ICT applications, equipment, peripherals, service contracts and infrastructure by 30 June 2011. Registration of each asset should include IPv6 Native compliant, IPv6 Capable compliant, not IPv6 compliant, unknown, not applicable (see definitions).
Goal	To enable Agencies to achieve a smooth transition by the Tasmanian Government from use of Internet Protocol version 4 (IPv4) to IPv6.
Definition - ICT Asset	ICT Asset is defined as any ICT system, application, equipment, peripheral, service contract or infrastructure
Definition – IPv6 Capable	"IPv6 'capable' is defined as a system or product capable of receiving, processing and forwarding IPv6 packets and / or interfacing with other systems and protocols in a manner similar to IPv4. Criteria to be considered IPv6 capable are: conformant with the IPv6 standards profile contained in the United States Department of Defence IT Standards Registry (DISR) (a US publications as no publication currently exists within the Australian Defence Force; maintaining interoperability in heterogeneous environments with IPv4; commitment to up-grade as the IPv6 standard evolves; and availability of contractor/vendor IPv6 technical support."
Definition – IPv6 Native	IPv6 'native' is defined as a system or product capable of receiving, processing and forwarding IPv6 packets and / or interfacing with other systems and protocols only.

Performance Measurements

Output	Measurement
Achieve100% response from of Agencies that they have completed IPv6 identification and compliance surveys of agencies ICT Assets in the Tasmanian Government network are IPv6 Capable	All agencies have completed IPv6 compliance surveys of agencies