TIPT App Development Environment

Summary

The TIPT App Development Environment is a standards based Application Programming Interface (API) allowing customers and developers to rapidly innovate by developing applications that enhance the TIPT service.

Get creative and achieve a more rapid innovation culture by integrating your business systems and other applications into our Cloud Collaboration TIPT platform without significant investment.

The TIPT App Development Environment consists of the API platform and our certification lab in-built with a three tier operational model that includes:

- Telstra owned, operated and supported apps, including Telstra Business Connect (TBC) – our desktop and mobile collaboration app

- Certified 3rd party apps accredited on our network and supported by our partners, including presence applications (integrating Microsoft Lync with TIPT)

- Open tier, allowing customers to develop specific applications to meet their individual needs.

The TIPT App Development Environment platform interacts with your TIPT service through two components:

- **Actions** – allows the TIPT platform to perform an activity such as calling a number or diverting a call.

- **Events** – the platform notifies the user about a change in status such as an incoming call or a change in call status.

You can access the platform via the public internet or a TIPT connected Telstra IP-VPN.

TIPT App Development Environment
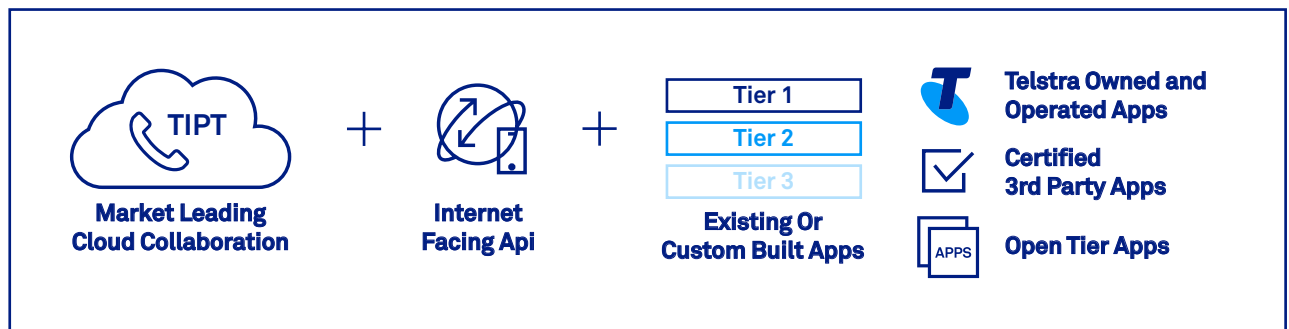
Features	Benefits
Integrate 3rd party applications into your existing business processes.	Innovate and drive business agility to meet specific customer and business needs.
Rapidly build and deploy capabilities using the TIPT App Development Environment.	Promptly solve business problems and address identified opportunities.
Access to an online interface to develop applications using your existing TIPT credentials.	Environment available to existing TIPT customers at no extra cost and with minimal setup.
Access to Telstra's certification lab so developers can authenticate their applications in the TIPT environment.	Remotely certify apps in controlled Telstra environments to lower deployment risk.

Technical specifications

The API platform provides a rich set of Web 2.0 interfaces for integrating TIPT services with desktop clients and Internet based applications. Telephony-related events, notifications and actions are exposed through a simple, well-documented web services interface.

The platform uses the commonly deployed and well-understood RESTful standard, allowing quick and easy adoption without any need to understand the underlying telephony network. The TIPT App Development Environment authenticates and authorises all transactions, as well as performing strict integrity checks, to ensure your data and network remains secure.

Programming languages used to communicate with the platform include:

- **Hypertext Transfer Protocol/Secure (HTTP/S)** – Access to the TIPT App Development Environment is entirely over HTTP/S, whether the application is embedded in a webpage, desktop software, mobile application or machine-to-machine.

- **eXtensible Markup Language (XML)** - Requests or Responses may include data in the standard XML format. This allows common formatting of data between the client and the server and for simplified processing by the application.

- **JavaScript Object Notation (JSON)** - A lightweight text-based format for representing simple data structures. JSON is provided as an alternative to XML.

The API itself consists of two components called Actions and Events.

Actions are synchronous requests that an application may make to the TIPT platform to do something. For example, modify a TIPT service configuration attribute, or answer a call.

The following types of Actions requests are available:

- **Call Management** – Exposes real-time call control primitives, such as, Click To Dial, Answer, Hold, Transfer.

- **Call Status** – Exposes the real-time abilities to retrieve the list of active calls and determine the call state.

- **Call Lists** – Exposes the commonly accessed lists, such as placed, received, and missed call logs.

- **Service Management** – Exposes the ability to retrieve and configure services.

Events are asynchronous notifications about the state of a TIPT resource. Applications can be set up to receive these notifications from the TIPT platform – on the arrival of a new call or completion of a call that was in progress, for example.

The following types of Events notifications are available:

- **Basic Call** – Notifications about when a phone is ringing, answered and hung-up.

- **Advance Call –** Notifications about all call control activity and call state.

- **Voice Mail Messaging –** Notifications about the arrival/existence of voice messages waiting for a user.

- **Call Centre Queue –** Notifications about call centre queue information, such as the number of calls in the queue.

A list of Actions and Events commands can be viewed on the following test web pages:

- **https://xsi-actions.tipt.telstra.com/ com.broadsoft.xsi-actions/test/**

- **https://xsi-events.tipt.telstra.com/ com.broadsoft.xsi-events/test/**
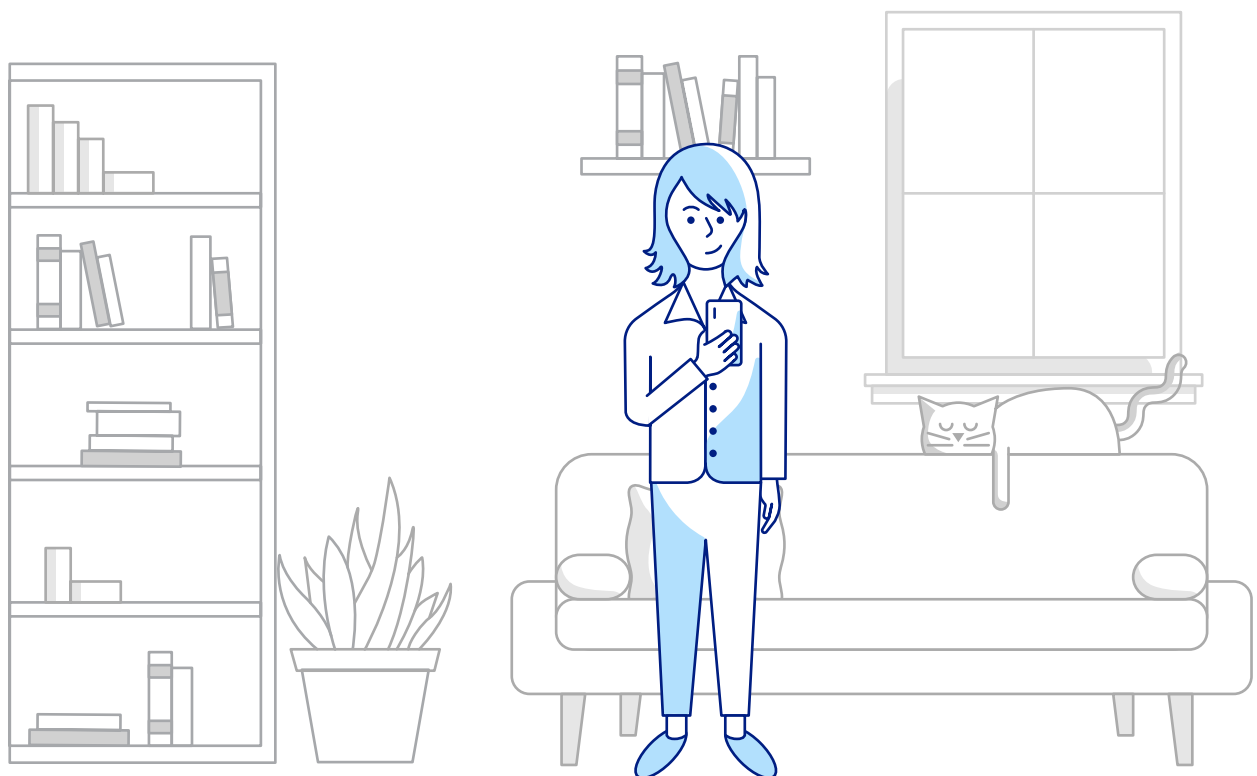
Once an application has been built, specific Telstra network certification can be sought by applying for access to the Telstra remote certification lab via the **TIPT website.**

You can access the platform via the public internet and TIPT connected Telstra IP-VPNs.

About Telstra

We provide network services and solutions to more than 200 of the world's top 500 companies. They rely on us to do business across 240 countries and territories and to enable greater productivity, efficiency and growth.

Our solutions offer the best of all worlds – skilled people and a rich portfolio of services delivered on our world-class Telstra Next IP® network and Next G® network. To ensure reliable performance, they're monitored and maintained from our dedicated centres using advanced management and operational systems. And they're backed by Telstra Enterprisegrade Customer Service® and one of Australia's largest and most qualified field and technical workforce.