



Who are Bendigo Community Telco?

- We are a community owned and run Service Provider
- We have wholesale agreements with the major carriers, an amount of our own infrastructure, our own Data Center facilities and PoPs in every state.
- We provide a range of services normally unavailable cost-effectively outside a metropolitan area.
- One of our major growth services has always been managed private networks

Historical Scenario

- In the past our Monitoring, Alerting and Reporting tools were a mixture of open-source and homegrown software.
- Our NMS requirements had exceeded our existing capabilities
 - Alerting and Reporting was reasonably primitive
 - SNR too low in event correlation to be useful
 - Network Engineers not used cost-effectively

Historical Requirements

New single NMS that provides:

- Network event management
- Network availability monitoring
- Network topology discovery
- Consistent rapid alerting capabilities
- High redundancy and Scalability
- SLA reporting capabilities to customers
- SP environment capabilities
 - Not a single business network, but multiple.
 - Multiple Secure MPLS-VPNs with potentially overlapping address spaces

Solution

Tivoli's Netcool

- Provides the key requirements
- Used by Telstra, AAPT, SingTel, AT&T, NTT, BT, etc

External Partner



- Could provide resources immediately
- Recommended by Cisco
- Tivoli is a specialty

Solution Components

IBM Tivoli Netcool Omnibus

- Real time fault management

IBM Tivoli Netcool Network Manager IP

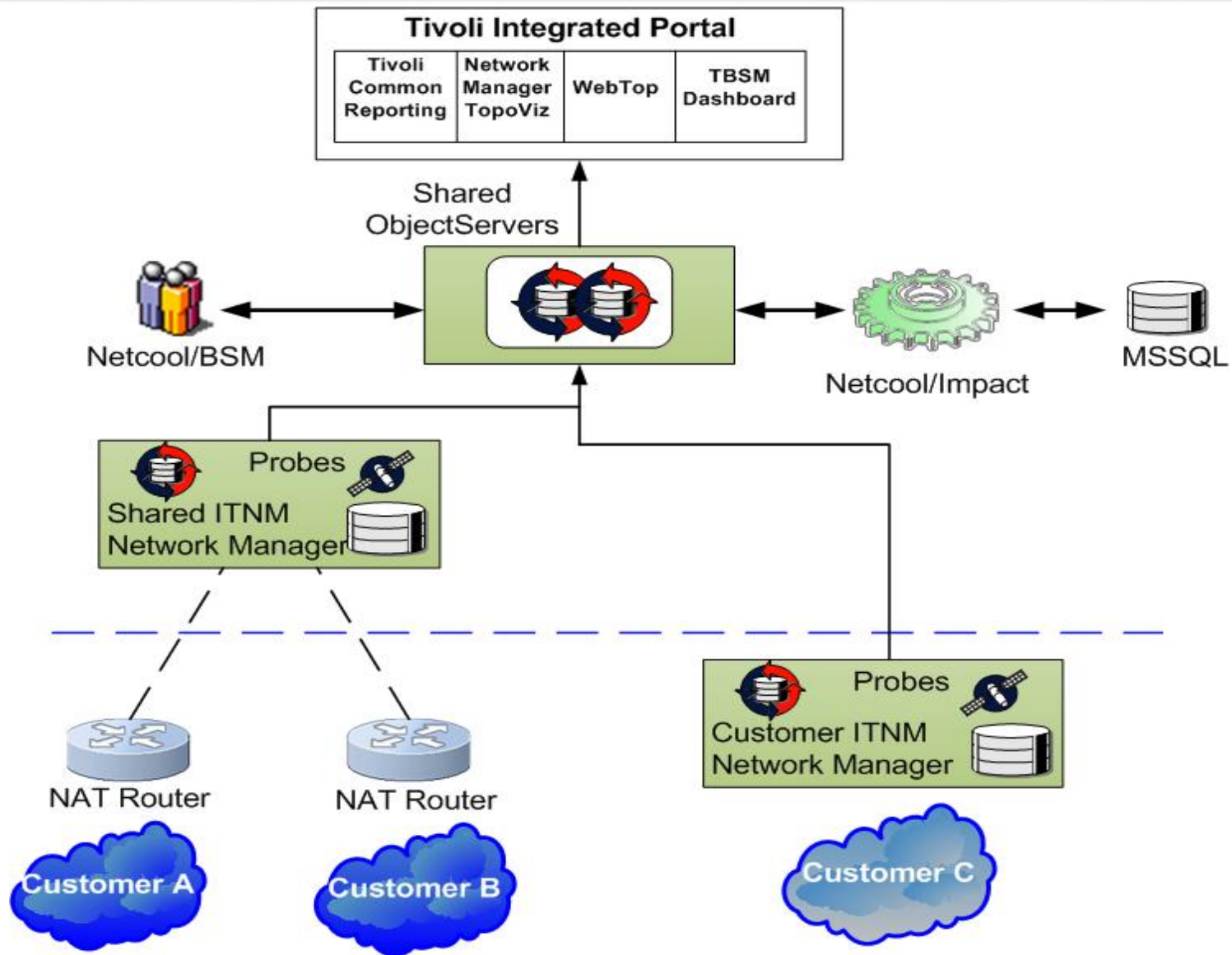
- Network discovery, active polling and RCA solution

IBM Tivoli Netcool Impact

- Advanced correlation, analytics RCA solution and external database integration

IBM Tivoli Netcool Business Service Manager

- SLA Management and service modeling



Initial Outcomes

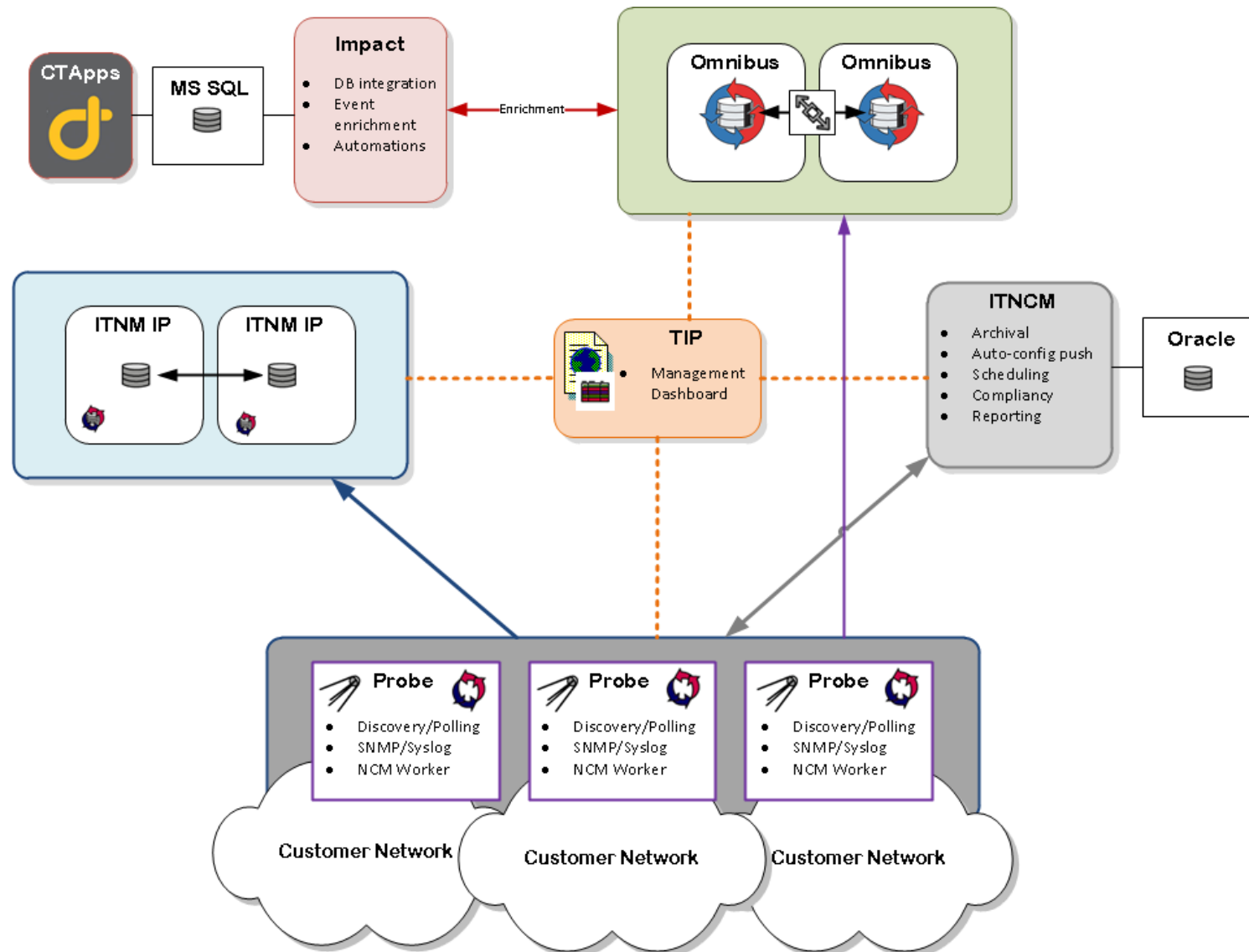
Milestones:

- Collapsed Network event management
- Network availability monitoring
- Consistent rapid alerting capabilities
- SP environment capabilities
- Analysis & reporting capabilities of historical event data using *Context* from Eirteic

Project Review

Shortcomings:

- Too many functions on dedicated hardware
- Lack of knowledge in-house
- Multiple topology databases
- 'Fat' probes



Future...

- Integrated Configuration Management – ITNCM
 - Configuration Archival
 - Work scheduling
 - Automated configuration push
 - Compliancy reporting
 - NCM Beta
 - Integration of Work scheduling and Change management
 - Streamline network configuration in provisioning of services