



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 Key services has always been managed private networks

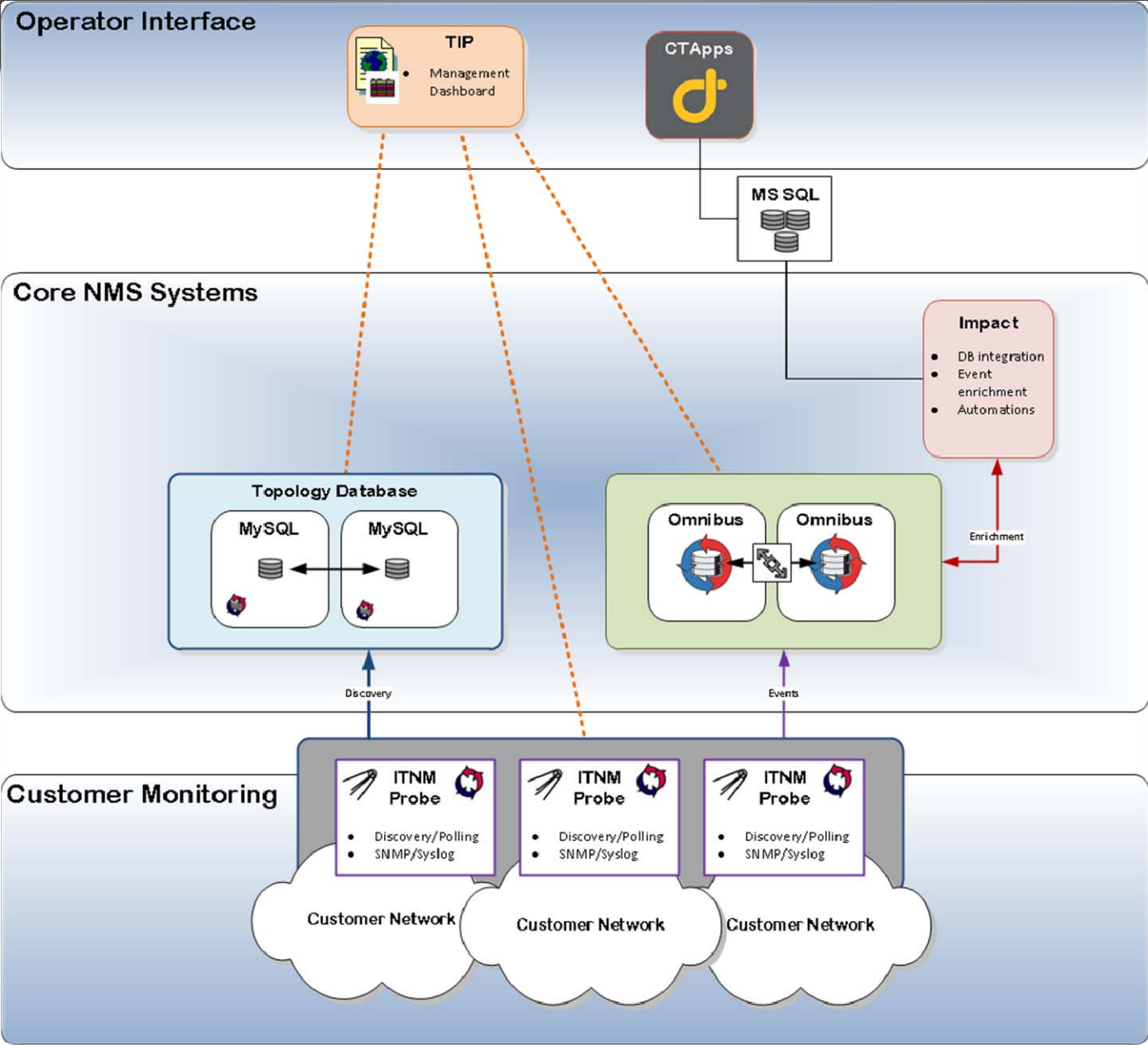
Historical scenario

We needed a single NMS that provided:

- Event management
- Availability monitoring
- Discovery
- SP environment capabilities
 - Not a single enterprise network, but multiple.
 - Multiple Secure MPLS-VPNs with potentially overlapping address spaces
- Consistent rapid alerting
- Scalability
- Customizable reports

We deployed:

- Tivoli Netcool Omnibus
- Tivoli Netcool Network Manager IP
- Tivoli Netcool Impact



Missing Piece...

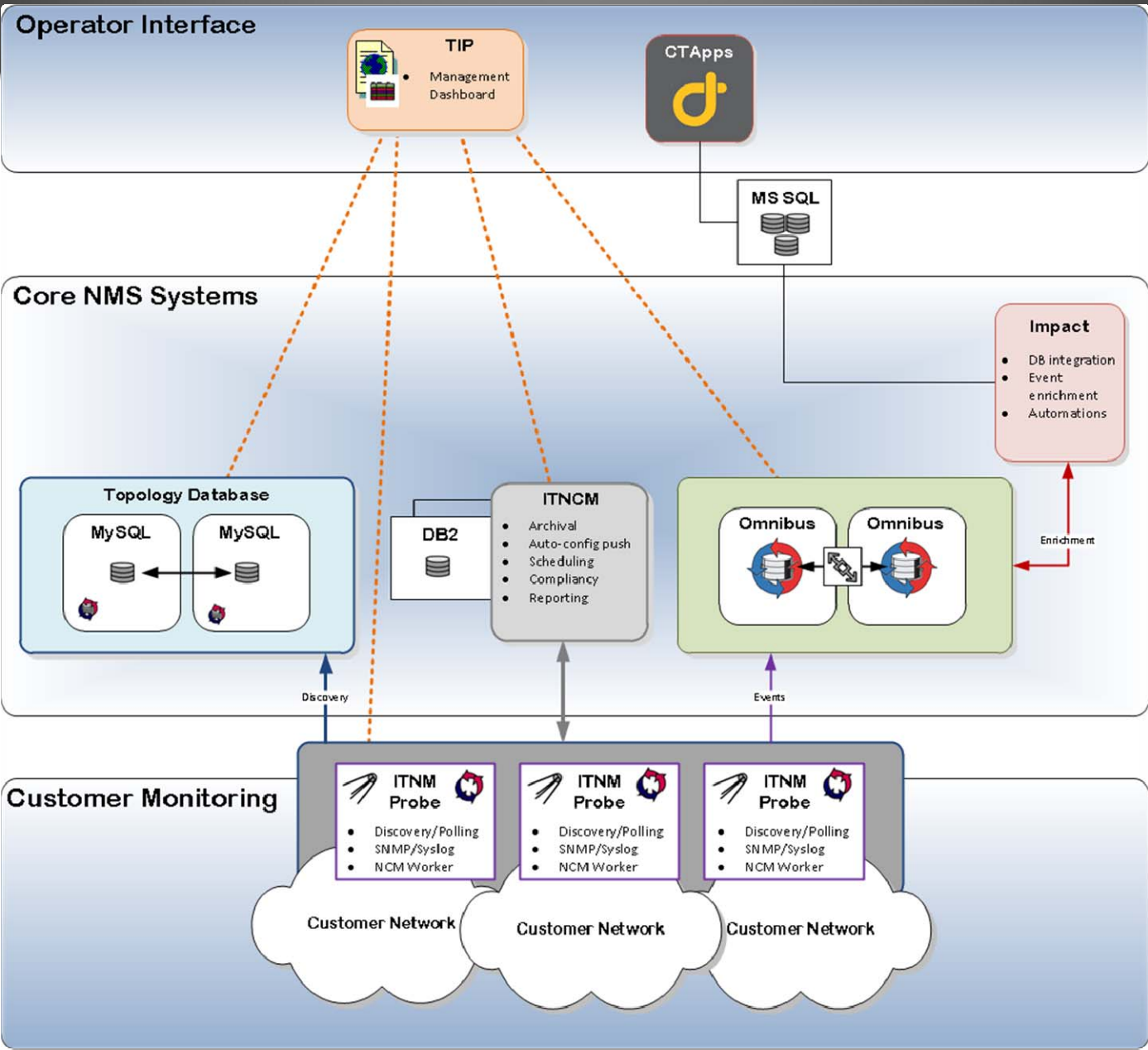
Integrated Configuration Management

Existing tool:

- Fairly basic – archival, and config push.
- Inexpensive, but manually populated and maintained
 - MACs in network needed to be replicated
 - Difficult to audit Completeness and accuracy
- Separate instance for each network

Chosen Solution:

IBM Tivoli Netcool Configuration Manager



Primary Outcomes

Configuration Archival

- Archival, Retentions, Differential, automatic re-archival

Configuration push

- Bulk minor changes (e.g. ACL changes)
- Bulk data collection (e.g. DSL sync stats)

Integration with existing systems

- Provisioning Systems
- Service Desk

Compliance reporting

- Report on policy breaches where config varies from template

Secondary Outcomes

IDT as a central Jump host

- Granular authorisation in multiple networks
- Centralised access without compromising on security
- Comprehensive logging

Configuration push

- Work scheduling
- Streamline network configuration in provisioning of services
- Integration of Work scheduling and Change management

Compliance reporting

- Service Performance reporting
- Pre-emptive compliance checks

Use Cases

- Provisioning customer networks
 - Provisioning team accepts order for new network
 - Details from order are used in config template pushed via API as a UOW awaiting approval
 - Network engineer reviews and approves
 - VRF, Interface and BGP configuration pushed across network
- Unscheduled change to an ACL
 - ACL removed from interface during troubleshooting
 - Alert generated during next scheduled compliancy check
 - Detail in NCM for device shows the commands entered
 - Network Engineer alerted to mistake, and ACL restored.