

# Stellenbosch Municipality



## Customer

- Stellenbosch Municipality, South Africa

## Industry

- Government

## Challenges

- High need for redundancy of the new VOIP solution
- Required advanced operator & centralized management functionality
- Conferencing facilities
- Re-use of existing Yealink IP terminals

## Solution

- UNIVERGE 3C servers on 2 main sites
- Business ConneCT Operators
- Centralized management system

## Results

- Geographical redundancy via the 3C Active/Active system
- Connection to 662 IP terminals across 66 sites
- Centralized and flexible management

[www.stellenbosch.gov.za](http://www.stellenbosch.gov.za)

“We were very pleased with the solution provided by NEC and Gijima. It fully meets our requirements for advanced and reliable communications.”

*Brian Mkaza, Head of Department IT, Stellenbosch Municipality*

## Challenges

In April 2018 the Stellenbosch Municipality (SM) published a tender for the supply, installation and maintenance of an IP based PABX. The tender requirements included redundancy based on an Active/Active state, redundant servers, high-end operator functionality, voicemail, expense management, conference facilities and re-use of existing Yealink IP terminals.

NEC’s business partner in Southern Africa, Gijima, was one of the companies that competed to win this bid and managed to win it despite not being the cheapest bid.

Factors considered during the design included flexibility, cost reduction, reliability, availability and future growth. Gijima and NEC were convinced that the proposed design would deliver on all requirements.

## Solution

The deployed servers or virtual instances of NEC’s UNIVERGE 3C operate in an Active/Active state. This is a key differentiator for 3C, in that other competitors utilize VMWare High Availability and Fault Tolerant capabilities to provide redundancy and failover. With 3C’s Active/Active deployment methodology all deployed 3C servers and/or instances can handle calls, register phones and provide unified communications irrespective of the physical location of the voice servers.

The primary 3C voice server was set up in the main Municipal building to serve that location’s telephone users and a secondary 3C voice server at the Fire and Rescue Station to service the telephony users in that region. Because 3C provides a single application image, including Voice, Unified Communication and Unified Messaging, all of these applications share in the high availability and geographic redundancy that 3C offers. All at no additional costs.

3C is software based, lowering customer cost and preventing obsolescence. 3C is built from the ground up on a Service Oriented Architecture.

Business Connect Operator Console was used to offer switchboard functionality for the Stellenbosch Municipality. A PC-based operator license is deployed for each of the main sites. Business Connect is a server-based application created specifically to provide switchboard functionality and enhance the operator attendant call handling and call distribution capability.

The NEC 3C platform has 5 different management administration levels that allow for system changes, anything from a simple name change all the way up to advanced system configuration changes. Platform administrators are given access to the platform by making use of username and password authentication, which will in turn allow them pre-defined access level to perform changes on the system. Call recording is handled by 3C for ad hoc recording of telephone conversations.

The 3C management system has provided a centralized portal for any moves, adds and changes to users. For the near future Stellenbosch Municipality is also considering NEC and Gijima for its emergency call center.

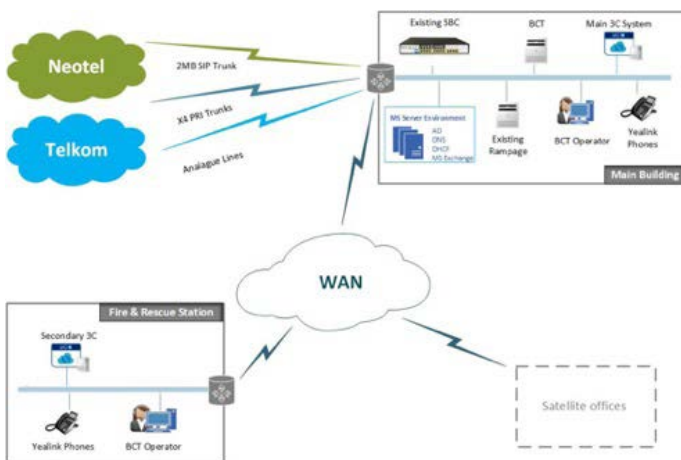
## Profile

Stellenbosch Local Municipality governs the towns of Stellenbosch, Franschhoek and Pniel, and the surrounding rural areas, in the Western Cape province of South Africa. Stellenbosch is situated about 50 km from Cape Town and is flanked by the N1 and N2 main routes. The municipal area covers roughly 900 km<sup>2</sup>.

Stellenbosch town is the second oldest town in South Africa, dating back to 1679 when an island in the Eerste River was named Stellenbosch by the then Governor of the Cape, Simon van der Stel. The first farming activities in the area were started in that year. Today, the area has become primarily known for its extraordinary wines, fruit, world-renowned cultural landscapes and exceptional scenic quality.

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## Results



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Installation of this solution started late November 2018 and took approximately 3 weeks to complete.

The UNIVERGE 3C provides high availability and geographical redundancy due to the distribution between the primary server at the Stellenbosch Municipality Main Office and the secondary server at the Stellenbosch Fire and Rescue Station. These two systems work in an “Active-Active” state thus offering redundancy.

For further information please contact your local NEC representative or:

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