

# CASE STUDY

# UNITED NATIONS DEVELOPMENT PROGRAMME

The United Nations Development Programme (UNDP) is the United Nations' global development network, an organization advocating for change and connecting countries to knowledge, experience and resources to help people build a better life. To achieve this mission, connectivity to organization's resources plays a critical role to ensure continuity of service as many countries where the UNDP works do not have a robust telecom infrastructure.



## The Challenge

To bring Internet communication to these remote areas, that have minimal telecom infrastructure. The UNDP uses satellite links (one main and one backup) to support their network. With this approach, they face a number of challenges including:

- Satellite links are susceptible of failing based on changing weather conditions.
- Each site has two WAN links, one principal and one backup. The backup links are only used when the principal ones fail and switching links is time-consuming since it's dependent on human interaction.
- When a WAN link fails, there is an added layer of diagnostics to determine the source, which will delay the implementation of the second link.

With offices in over 177 countries, and with 42% using satellite links, continuity of communications is mission-critical for the organization. Key corporate applications such as ERP and email, many of which are connected through satellite links, must be available to users at all times. When a satellite link fails, a resolution must be handled through human interaction causing significant downtime. If the main link is functional, the back-up link remains idle, which means there are untapped resources available that aren't being used.

## The Solution

- The Martello solution was selected to provide available and optimized connections to local users ensuring uptime and access to IP applications and services.
- In the initial deployment, Martello assisted the UNDP in deploying over 40 units to remote areas such as Burkina Faso, Sudan, Ghana, India and Ethiopia.

The UNDP started working with Martello in the spring of 2006 on a pilot project to meet their challenges and resolve them. Martello's networking solution were used to manage two WAN links in select locations to see how effective link load balancing could be for these unique environments. Another challenge for this deployment was that the locations where these devices were going to be set up is very warm, often reaching 45°C almost on a daily basis.

Once the 12-month pilot phase was completed, it demonstrated that both links could be used for performance and redundancy purposes, and the UNDP awarded Martello with a contract for 24 months to supply and assist in this project.



## Conclusion

Martello Technologies continues to supply unlicensed units that can be very rapidly deployed from the UNDP's global facilities and licensed in the field.

Factors which contributed to the selection of Martello's products include the quality of the product, the ability to operate in harsh conditions, capacity to meet the UNDP's specific and unique requirements, ease of deployment and overall quality of support.



In the regions where our offices are located, we now enjoy uninterrupted Internet service and we can capitalize on all our links.

*Manish Pradhan, Telecommunications Manager*

### About Martello

Founded in 2009, Martello Technologies is headquartered in Ottawa, Canada with staff in Canada, the Netherlands, the United States and France. We offer solutions that deliver confidence in the performance of real-time services on cloud and enterprise networks. Our products include unified communications (UC) performance management software, IT systems visualization software and SD-WAN technology.