



## A Network for a Galloping City: Reliable, Efficient, and Easy to Handle

### **INDUSTRY:** Local government

The city of Waregem | Belgium

The key measure of efficiency of any local government body lies in its ability of “getting things done” – whether through the execution of public works projects or tending to the day-to-day affairs of citizens. Let’s see how the flexible, well-performing and easy-to-manage network infrastructure, designed by Black Box and built on Extreme Networks products, makes life easier at the City Hall of Waregem!

Waregem’s moniker, “the galloping city” can be read as a playful reference to both the history and the future of the city in the Belgian province of West Flanders, home to nearly 39,000 citizens. Well-known for the Waregem Koerse, an annual horse race dating back to 1847, the city has also borne witness to a revolutionary, all-encompassing urban renewal in which various functions are brought together.

This is best reflected in The Pand – a vibrant shopping mall with extensive retail facilities, restaurants and pubs which, interestingly enough, also happens to be the location of the municipality’s administrative center. Whether you’d like to pick up your driver’s license, apply for a building permit, have a civil wedding or arrange care services for your family member, sooner or later you’ll find yourself at the City Hall of Waregem. The whole complex was constructed and financed by the municipality and is subsequently the property of the town itself.

### **More Services, More Connectivity**

Naturally, to ensure a seamless operation of the City Hall’s various functions, including offices for a number of social and communal services, but also the local library and the Public Center for Social Welfare (OCMW), which is operating in a separate building, the organization needs a robust, efficient and reliable network. To that end, local authorities have long relied on Black Box, a trusted IT solutions provider which delivers cutting-edge technology solutions and world-class consulting services.

---

*“ We have a good, long-standing relationship with the City Hall of Waregem, based on mutual trust and respect, vast technical knowledge of our engineers, strong commitment to the customer’s success and – last but not least – high-quality, well-fitting products and solutions from Extreme Networks”, says **Bart Amelinckx**, Account Manager at Black Box Network Services.*

---

With the steadily growing number of offices, services and infrastructure that needed to be connected to the network, also as part of the planned refurbishment of the shopping center (e.g. CCTV cameras, parking meters, point of sales, digital signage screens etc.), a decision was made at one point to gradually replace both the old core and edge infrastructure in a seamless, flexible and cost-effective way.

---

*“ The city of Waregem takes care of all the connectivity around the complex, including the shopping center, so the environment can be seen as quite complex. On the other hand, considering the critical role of the network in this particular case, its reliability and stability was of the utmost importance”, **Bart Amelinckx** adds*

---

### **Achieving goals while keeping it simple**

The first key step towards increasing network performance and availability was the move from an old EAPS ring topology to a more flexible setup built around MLAG connectivity. The complete redesign of the network done by Black Box involved the implementation of powerful, high-density 10 gigabit Ethernet switches from Extreme (X670-G2). The devices serve as the controlling aggregation switches within Extreme’s innovative Extended Edge Switching solution, simplifying the deployment and operation of connected edge switches.

---

*“When I make my network designs, I want them to work and achieve certain goals while also keeping them as simple as possible, so that the customer doesn't have to invest a lot in maintaining their network, especially if it falls on the shoulders of just one network engineer”, says **Rien van Maurik**, EMEA Network Solutions Consultant at Black Box International BV.*

---

*“Moving from old EAPS rings to the current setup based on MLAG resulted in the higher efficiency, security and redundancy of our network. We are very happy with the reliability and performance of our current infrastructure – we can count on the network to be always there and doing its job, so that we can do ours”, says **David Vanlancker** from the IT department at the City Hall of Waregem.*

---

## Hardware flexibility

The new solution not only increased network reliability, but also made it easier to connect other sites as well. As part of the renewal and upgrade of the central computer systems within the city of Waregem, the central server systems have been physically distributed over the existing server rooms. To that end, Black Box used a fiber optic loop to set up a high-speed connection between the central server room in the City Hall and a new server room in the Public Center for Social Welfare building, situated around 500 meters away. Rien van Maurik and the team were able to mirror the core setup from the City Hall IT room by implementing another pair of X670-G2 core switches.

Not long after that, David Vanlancker came to a conclusion that the old edge switches at the OCMW building, required a renewal too. Black Box proposed a smart solution: to reuse two legacy X460-G2 and X440-24P switches from Extreme and mix them with a newer technology. As an extension of the central ExtremeXOS aggregation switch, V400 edge devices/ports deliver the same network services and software features across the network, simplifying service delivery and enabling advanced features to be seamlessly extended to the network edge. Additionally, V400 devices and ports are centrally configured from the previously installed X670-G2 core switches, streamlining network operations and reducing management overhead.

---

*“Right now, the entire core and edge network infrastructure is based on Extreme and the customer have never had any complaints about it”, says **Rien van Maurik**.*

---

*“Apart from their reliability, Extreme solutions provide another great value for us as they help us reduce both capital and operating costs. The compatibility and flexibility of products allows us to maximize our return on investment while also being able to spend less resources on day-to-day operations and management”, **David Vanlancker** adds.*

---

## The next step: More network visibility, control and security

Thanks to the current solution implemented by Black Box, the IT team at the City of Waregem has fewer configurations to make, effectively reducing the risk of a human error that can potentially cause network downtime. Higher network availability, conversely, means less time spent on troubleshooting. Today, the environment is more integrated, meaning better manageability and visibility of the network. However, this is the area that David Vanlancker and his colleagues are looking forward to further improving. The next step? More network automation.

---

*“We are in talks with the City of Waregem to bring their network automation and security to a whole new level, as natural next step in the evolution of their environment. 2024 will see the implementation of the ExtremeCloud IQ – Site Engine platform, combined with ExtremeControl, a network access control that will allow the customer to control users and devices across their network with granular visibility and in-depth control”, **Bart Amelinckx** explains.*

---

*“Our goal is achieve better network security with more automation. We want the devices that connect to the network to be automatically provisioned, profiled, and assigned the right security policy. It's important for us to allow the employees at the City Hall to connect with their devices to the network without requiring any IT assistance”, says **David Vanlancker**.*

---

## The power of cooperation

There are two major factors contributing the success of this project: the technology and the people. While Extreme Networks solutions have proven to be the best match for what the City of Waregem needed, it is the Black Box engineers that maintain great customer relationship based on the strong commitment to ensuring the best possible service over the years. And this highly individual approach pays off.

---

*“If you find yourself in a city in West Flanders, Limburg or the Antwerp province, there is a pretty good chance I've designed their municipal network and my Black Box colleagues are helping with their maintenance”, Rien van Maurik admits with a smile. “Belgium is not a big country, especially if you narrow it down to the Flemish Region, and the IT teams in cities and municipalities often talk to each other and exchange their experiences. A lot of our customers from the local government sector in Benelux are already using the ExtremeCloud IQ – Site Engine and ExtremeControl solutions and we know it will be of great help for the City Hall of Waregem”.*

---

## ABOUT BLACK BOX

Black Box® is a trusted IT solutions provider delivering cutting-edge technology products and world-class consulting services to businesses across the globe in every industry. The breadth of our global reach and depth of our expertise accelerate customer success by bringing people, ideas, and technology together to solve real-world business problems.

