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TIVIT

YARA – Networking

Customer Name: Yara Brasil Fertilizantes S/A

Type of Customer reference: Public

Public reference: <https://www.tivit.com/cloud-solutions/public-cloud/public-cloud-aws/>

Start Date of Project: 01/12/2020

End Date of Project: 31/03/2021

Client URL: <https://www.yarabrasil.com.br/>

Public case URL: <https://tivit.com/yara-escolhe-tivit-para-ser-sua-parceira-na-jornada-para-nuvem/>

<https://tivit.com/yara-caso-de-sucesso/>

Founded in 1905 to solve the emerging famine in Europe today, Yara has a worldwide presence, with about 15,000 employees and sales to more than 160 countries. In Brazil, it has its head office in Porto Alegre and has an office in São Paulo and Paulínia, five production plants and 24 own fertilizer mixing units, with presence in the main agricultural production centers. It also has two production units of environmental solutions, five mining units and two own port units.

This structure of factories distributed across different regions, along with several VPCs used to support solutions from these factories, required many VPNs connections and network pairing, and this generated a high administrative complexity due to the large number of routes.

TIVIT conducted a study of these connections and revisited the architecture, where the result was the suggestion of implementing Transit Gateway, due to its ability to work with flexible multicast, eliminating other intermediate solutions that were not able to guarantee a high throughput and bandwidth.

With the implementation of AWS Transit Gateway, it was possible to create applications distributed between VPCs, eliminating the need to upgrade huge routing tables to create pairing relationships. The result was ease of implementation, management and diagnosis of problems. In addition, the ability to add VPCs, VPNs, or AWS Direct Connect gateways to meet multiple demands, AWS Transit Gateway offered a way to simplify network architecture, reduce operational overhead, and easily manage connectivity.

During the implementation we encountered some challenges, referring to network overlap and routing priority, where it was necessary to break the project in phases, prioritizing the main branches, proving that pairing despite its simplicity, can leave the environment complex and difficult to scale.