

Case study: Petrochemicals network
 Client: not disclosed
 Location: Rotterdam industrial area
 Time: 2017 - 2018



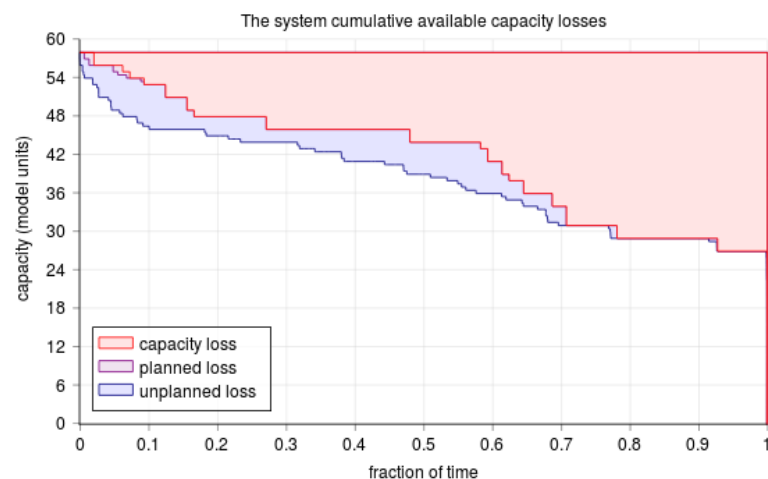
Problem

Four companies are connected to each other via a pipeline network as supplier and consumer of raw material for high value chemicals. The raw material cannot easily be transported in or out, so the parties are highly interdependent. All parties feel that the network is not used to the full extent and improvements can be made. However how can the parties make sure that their investment plans create maximum value? How can they share information without revealing commercially sensitive information?

SecuoS approach

SecuoS worked closely with each company and used their individual data to build an integrated availability model of the network. This made transparent the true losses that occurred over time and which events created the largest losses. It also showed which plants had underutilised capacity.

Having generated this common understanding, companies suggested investment proposals aimed at improving the network robustness. SecuoS built these proposals into the network model and evaluated the investment proposals in terms of additional production capacity. This enabled the individual companies to make data driven business decisions.



Outcome

Companies gained shared insight in the performance of the network as well as understanding of the causes of losses and the impact of planned and unplanned outages of the individual plants.

Companies learned which potential investments create value, how they can contribute to network robustness and how they can make use of incidental excess capacity. The modelling results were used to underpin board proposals.

The network model can be made available to companies, enabling them to monitor changes in the network robustness, to assess the impact of scheduled maintenance and to evaluate new investment opportunities.

Copyright is vested in SecuoS BV, Wassenaar, © SecuoS, 2019. Neither the whole nor any part of this document may be reproduced or distributed in any form or by any means (electronic, mechanical, reprographic, recording or otherwise) without the prior written consent of the copyright owner.

SecuoS BV