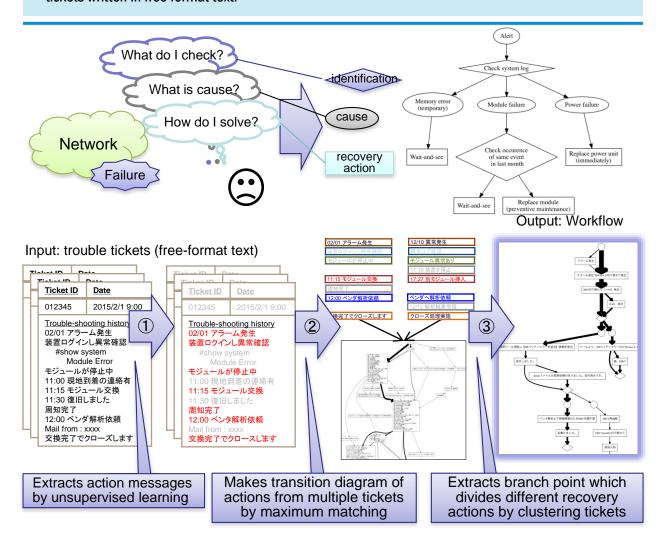
09

## **ESKORT: Mining Expert Knowledge from Trouble Ticket**

~Automatic Workflow Extraction from Unstructured Text for Network Operation ~

## **Abstract**

Recent large-scale and diverse networks have resulted in increased unavailable network failure and in complicated root cause analysis. To shorten the mean time to repair, a definition of corrective actions that includes cause identification and recovery action is required. However, the definition of complex corrective actions is difficult and time-consuming. We have developed ESKORT: a system that automatically visualizes corrective actions, i.e., the procedure of cause identification and recovery action, using massive unstructured documents recording trouble-shooting histories. It can visualize the past workflows of the corrective actions as flow-chart using actual network incident tickets written in free-format text.



## Related works

[1] Akio Watanabe, Tatsuaki Kimura, Tsuyoshi Toyono, and Keisuke Ishibashi, "Branch Point Extraction from Process Event Logs for Operational Workflow Mining," IEICE technical report, vol. 114, no. 523, ICM2014-63, pp.55-60, March 2015.
[2] Akio Watanabe, Tatsuaki Kimura, Tsuyoshi Toyono, and Ken Nishimatsu, "Extraction Method for Operation Process Information from Trouble Tickets," IEICE technical report, vol. 113, no. 473, IN2013-199, pp.327-330, March 2014.

## Contac

**Akio Watanabe** NTT Network Technology Laboratories E-mail: watanabe.a(at)lab.ntt.co.jp

