

Root Cause Analysis Intermediate

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Description

This version of the class is aimed at the senior sysadmin. You have a decade or two of experience in the industry, you are T-shaped (specialize in one or two areas but have expertise across a range of technologies), and you have accumulated numerous technical skills; now you want to deepen your meta-expertise. We will create the fog of war, then you'll practice applying a methodology to focus your attention, working with your team to divvy up tasks, escalating key insights to each other, integrating clues from a range of sources, and producing reports for business leadership. In this version of the class, we spend more time in small group and more time practicing communication skills than we do in the beginner version. In addition to the technical contributors, each team will need a Problem Manager – perhaps an unusually broad engineer, perhaps a resource or project manager comfortable with coordinating teams of techs.

Troubleshooting is hard. In hindsight, the answer to a problem is often obvious, but in the chaos and confusion of the moment — with too much data flowing in, time pressure, misleading clues — slicing through the distractions and focusing on the key elements is tough. This is a hands-on seminar: you will work through case studies taken from real-world situations. We divide into groups of 5-7, review a simplified version of Advance7's Rapid Problem Resolution (RPR) methodology, and then oscillate, on a half-hour cycle, between coming together as a class and splitting into groups. During class time, I describe the scenario, explain the current RPR step, and offer to role-play key actors. During group time, I walk around, coaching and answering questions

The course material includes log extracts, packet traces, strace output, network diagrams, Cacti snapshots, and vendor tech support responses, all taken from actual RCA efforts. Preview the [deck](#) to get a feel for how your day will look. BYOL (Bring Your Own Laptop) for some hands-on, interactive, team-oriented, real-world puzzle solving.

Who should attend

Sys admins and network engineers involved in trouble-shooting multidisciplinary problems; project managers and resource managers who lead such teams.

Take back to work

Practice in employing a structured approach to analyzing problems which span multiple technology spaces.

Case Studies

- HPC Cluster Woes
Intermittently, interactive performance on a high-performance computing cluster grinds to a halt, nodes, hang, jobs vanish from the queue ...
- Storage Stumbles
Most of the company relies on an 800TB wide-striped storage system, with a multi-protocol (SMB, NFS, iSCSI) front-end from one manufacturer plugged into a Fibre-Channel attached back-end from another manufacturer. Intermittently, the back-end fries a disk, IO latency spikes, clients crash ...