;login: logout

/var/log/manager Message Not Received

ANDREW SEELY



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ommunicating about technology can be a greater challenge than the actual technology itself, especially when people from different academic and professional backgrounds need to find common understanding. We sometimes miss that when communication between highly technical people fails, the systems they support can pay the price with poor performance and loss of availability. Understanding communication breakdowns between team members and taking action to ensure that systems are effectively maintained, operated, and repaired is the manager's job. When the manager fails to act to repair fractured communications between team members, the path to a brittle and failure-prone production environment is short.

One of my employees, a BMC Remedy developer on the engineering team, went to the change manager requesting an emergency reboot of the middle tier server during peak hours because something "wasn't right." We knew something wasn't right; performance was off and there appeared to be some sort of intermittent freeze-up of a subsystem on the server that was causing users to get kicked out every few minutes. The change manager asked a reasonable question: How do you know that a reboot will fix it? The developer was sure a reboot would work, but her explanation started out talking about the subsystem and ended up with "it's broke anyway" and "you wouldn't understand." The change manager sidestepped and sent her to the operations manager to get higher approval. The operations manager heard the explanation and interpreted it as a smoke screen for the fact that the developer didn't have any idea what the problem was and was only guessing.

Guessing. In production. At peak. Emergency reboot. Denied.

Communicating Means Really Listening

The developer came to me, frustrated and flustered. "Why don't they understand?" By this time, at least half a dozen people in the technical and management operations teams had different versions of the story, and all were able to agree on one point: Although there was some sort of problem, the application owner didn't understand it.

The developer and I talked for a bit about how no one understands and no one trusts and how the organization was "broken." After she calmed down somewhat, I asked her to describe the current problem and what she felt was the cause. I'm a senior manager in our organization, but I'm also a long-time system administrator with a strong computer science background, and I understand how systems interact and how computer architectures work. After asking a few more probing questions—what are the different subsystems in the server, what services do they provide each other and external servers, what type of data is flowing through the system—what the problem likely was became clear. The subsystems used the local loopback network interface to communicate internally, but a process had a stale socket opened on the loopback that was preventing successful inter-process

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communication (IPC). The only way to clear the stale socket cleanly would be to reboot the operating system.

"That's what I've been saying all along," the developer said.

We went back to my counterpart in operations together and explained the stale socket and IPC problem and how it was causing intermittent failures of the user interface. The change manager asked, "Why didn't you tell us that the first time?" The emergency reboot during production peak was approved, and ten minutes later the service was performing within normal parameters.

Communication as a Function of the Manager

Ask anyone in an organization and they'll tell you how important good communication is. Some organizations recognize the need for good communication, and have lots and lots of meetings, to varying effect. Others have a strong culture of communication, and as a result have fewer meetings. Ensuring that there is ample opportunity for all types of communication—when everyone needs to know something top-down, when everyone needs to come to consensus, and when someone needs to move information from one brain to another—is the manager's job. Sometimes the manager must facilitate communication between others. The important skill for the manager is to know the difference.

In the case of the misunderstood developer, my job essentially was to interpret a highly technical subject matter expert's explanation and translate it into non-technical manager-speak. By taking the easy approach of telling the developer to come back later with a coherent explanation, or asking her to send a junior developer whom we could "understand better," I would undermine and demoralize an incredibly strong technical team member who just had trouble being understood, and that approach wouldn't help solve the problem faster.

Even though every job posting we write includes words such as "must be an effective communicator," we don't test for that effectively beyond simply conducting an interview. We shouldn't casually dismiss technical excellence because it is obscured by verbal communications that aren't exactly linear. We should stand up to the management challenge of facilitating communication and set conditions for the success of the employee and of the technical mission. This process starts with trust and is propelled by patience, and it takes a lot of the manager's time and focus. Over time, people get better at trusting each other and understanding each other's intent when the words aren't obvious, but building a culture of communication is done one employee at a time. This effort scales linearly. There's no way to do it faster, but improving communication is part of the manager's job. Key ideas for managers of technical teams:

- Recognize that technical prowess and effective communications don't always go together;
- However, effective communication and mutual respect are like peanut butter and chocolate. Each is good by itself, but together they're excellent.
- Be a facilitator of communication and help overcome roadblocks. Remember that your employees' jobs are to get the work done, and your job is making your employees as effective at that as possible.
- Understand the different types of communication in your organization, be aware of what's working and what's not, and don't "fix it" only by holding more meetings.

Where Did We End Up?

Our team had a good teachable moment and a few laughs, after we were done being frustrated with each other and after the systems were back in production. Thanks to this episode, we now communicate more effectively in this group, and we have a running joke about how few people on our team actually speak "Remedyese," and how certain developers are not allowed to speak in public without an interpreter present. We have a newfound respect for each other's technical abilities. And we had a chance to talk about computer architectures and IPC, topics that I've made sure my charming and patient non-geek wife gets exposed to every chance I get. Our team still has new communications challenges crop up all the time, and we treat each one the same way—with patience, respect for people, and focus on mission. I'm the manager. That's my job.

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