

Date: June 21, 2004

Subject: Computing Division Helpdesk - New Enhancements

Background: The helpdesk is augmenting the current services with a new tool and a new service in late June. This is part of Computing Division's automation strategy that will enhance the work flow associated with high availability systems and core computing services. The Division has already made significant progress with automated monitoring that uses the notification and escalation work flow contained in Remedy ARS.

Automated Call Distributor: An automated call distributor (ACD) will be deployed that will allow intelligent routing of calls to available helpdesk agents during normal working hours. The system can be scaled from 1 – 10 agents as required and has flexibility to be easily modified as incidents occur and business requirements change. During the off-hours, the menu system will route emergency calls to the appropriate call center. The Customer Support Group is coordinating the install with the vendor and BSS. We expect to cut this into production in late June.

Answering Service: The Helpdesk has augmented the 8x5 operation with a local answering service. The vendor has about 80 employees, redundancy contingencies and therefore two locations, Lombard and Oak Lawn. The centers have modern call center tools and software and the company has been providing this type of service since the 1940's. It appears to be a good fit for the Computing Division's requirements, somewhere between the 1000+ seat goliath call centers and the 'mom and pop' answering service. The Helpdesk is working with the vendor to setup the work flow in their system with the expectation of cutting into production late June.

Background on off-hours calls: The volume of calls that occur off-hours is very small by helpdesk standards due in large part to the automated monitoring & notification that has already been put in place. The expected volume of calls (reported incidents) is less than one per day. The majority of these calls are issues with core services and high availability systems. There are a very small (but important) number of calls for computer security, building infrastructure, networks and hardware vendor dispatching. It is understood that there will also be some small number of calls that are not deemed emergency and will be forwarded to the helpdesk for resolution on the next business day.

More background on the answering service: The helpdesk and support groups have recently reviewed the list of high availability systems and the escalation work flow. The information has been provided to the vendor and they will populate their system with the data. They are also being provided the procedural documentation on contacting our hardware vendors (SGI, D1, STC, ADIC, HP/DEC, etc.). It is likely this answering service will interact directly with the Computing Division Remedy system in the future. However, by default they will use their system to timestamp calls, record caller id and voice messages and to generate and send various reports on activity to us.

When will these enhancements be put into production? All indications are that the ACD switch will go into production on Thursday June 24 and answering service will go into production in late June or early July and the in late June. It is highly desirable to have the ACD in place at the same time as the answering goes live, but it is not required.

How might an actual off-hours call work? When someone calls 630-840-2345, the ACD system (auto-attendant) will forward calls to the answering service based on user selection from a menu. For example, if the caller selects 'press 5 to report a building infrastructure issue', they will be forwarded to a specific and dedicated phone line (Direct-Inward-Dialing/DID's) for building infrastructure issues. The answering service will automatically understand the call is from Fermilab, that a caller wishes to report a building infrastructure issue and a specific script will appear on the agent's computer that will guide them through a process designed specifically for building infrastructure issues. After the agent has collected information from the caller, the agent will inform the caller that the Fermilab on-call will get back to them momentarily. The agent will then page the Fermilab on-call based on pager schedule, work flow and escalation information that we have provided them. The Fermilab on-call will receive a page from the vendor that will contain a brief text message that says something like 'Fermilab-Tel\*Assist -- please call 630-xxx-xxxx #yyyy – issue with building infrastructure'. The Fermilab on-call will contact the answering service and type in the account# and speak with an agent. This level of handshaking is required. If the Fermilab on-call does not check back with the answering service, the call is escalated. The escalation will mirror the escalation process in the Remedy workflow.

General information: The intention is to streamline and enhance the existing procedures and there are some changes in procedures and general information that should be noted.

- The answering service will provide Fermilab one telephone number to call for all human interaction. There will be different accounts (account numbers) that are setup in their software and are generally tied to specific support groups. By setting up the service this way we avoid calling the service with vague information only to have them search their records to find out who you are and why you calling. By using accounts, the operator will know who you are and why you are calling as the agent starts the conversation.

- There will be a separate 'account' for requesting off-hours hardware maintenance services (from external vendors) for high availability systems. The answering service will have a list of high availability systems, but it is the responsibility of the system administrator to ensure they are requesting hardware maintenance for a system that actually has uplifted support. The person requesting service must be either a member of one of the Fermilab support groups, managers responsible for the support groups or CD management.

- The answering service will be able to page support groups, but not individuals. You will not be able to call the service and ask them to have 'John Smith' call you. This can be accomplished by keeping your own records or going through the Fermilab

Communications Center (630-840-3000). The person requesting that a support group be paged must be either a member of one of the Fermilab support groups, managers responsible for the support groups or CD management.

- The concept of Remedy pager schedule override has been in place for sometime. Until the answering service is actually using Remedy, these changes must be communicated to the vendor by 1:00pm to be effective for off-hours the same day (by 5:00pm).

- Initially almost no filtering or screening instructions will be provided to the vendor. If the caller identifies themselves and indicates the situation they are reporting is an emergency, the appropriate support group primary will be contacted. Filtering, screening, specific questions to ask the caller or any other clear and specific instructions may be added to the script used by the vendor's agent at any time in future. Additions and alterations are requested through the Helpdesk by the responsible Fermilab support group.

- The answering service will provide detailed daily reports electronically at 8:00am with activity from the prior day. They will provide other reports on metrics, invoicing, etc. at some agreed upon frequency.

- Upon request from the Helpdesk for the purpose of post-mortem analysis, the answering service will provide the Helpdesk detailed call information including timestamps, caller id and will allow the Helpdesk to listen to actual recorded conversation (mp3 or other sound file format) between callers and agents. You will hear an audible beep periodically in the background which is required by law to let you know the answering service is recording the conversation.

- The answering service will be contacted for automated escalations through Remedy where contact fails for the support group primary, secondary and tertiary.

- The Fermilab helpdesk-mgmt support group will be contacted in the event that the answering service cannot properly route a call. In the context of a call that is not being properly routed or handled, this is the final level of escalation.

- Computer Security issues are actually routed to the Fermilab Communication Center who have existing procedures and processes.

- The answering service will not understand Fermi jargon and acronyms.

- The primary cost for this service is driven by how much time their agent is on the phone. The best use of the service requires us to be organized prior to calling them on the phone.

General Description of the Auto-Attendant: It is not possible to describe with precision exactly what you will hear when you dial the helpdesk @ 630-840-2345 because the scripting is flexible and we anticipate there will be changes made during the initial setup. Here is the plan for the initial deployment.

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During regular business hours (8:00am-4:30pm) the Auto-Attendant will have this basic script: “Hello, welcome to the Fermilab Computing Division Helpdesk. For immediate assistance concerning a security break in of a computer system or web pages press 1. General issues for non-personal computers such as email, database, network, software products or a system appears down press 2. If you need hardware service for a computer or system that is down, press 3. For new or existing computer account questions, password resets, Kerberos principles press 4. For personal computer desktop issues press 5. For all other computer related concerns press 8. Press 9 to listen to the options again.”

Second level message if phone is not answered.

The CD Helpdesk staff is currently working with clients in need of support. You may stay on the line for the next available person, hang up and send email to helpdesk at F N A L dot G O V or press 1 to leave your name, Fermi ID# and phone number for someone to call you back shortly.

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During off-hours the Auto-Attendant will have this basic script: “Hello, welcome to the Fermilab Computing Division Helpdesk. It is after our normal business hours. Our answering service is available for problems supported off hours. For immediate assistance concerning a security break in of a computer system or web pages press 1. For computer issues with email, database, software products or a system appears down press 2. If you need hardware service for a computer or system that is down, press 3. If there is a concern for a major Computing Division Network interruption, press 4. If you have building environment concern for a Computing Division area, press 5. For all other computer related concerns press 8. Press 9 to listen to the options again or stay on the line and leave a message with your name, Fermi ID# and phone number where you can be reached at on the next Helpdesk business day.”