Applied Technology, Inc.

White Paper

General Steps for KOMAND Chargeback Implementation

PACE Management Consulting Services

1. Allocate Personnel

Assign a “chargeback administrator” the responsibility for accomplishing implementation and give them the authority to carry it out. They will need to establish a contact in the systems programming and DASD management areas. They should have some applications experience and be familiar with JCL in an MVS environment as a minimum requirement. The rest of this document is intended for the chargeback administrator whose responsibility is to implement KOMAND.

This document deals with the primary steps required for implementation after KOMAND has been installed. More information on installation can be found in the KOMAND Installation Guide or chapter one of the User Guide. KOMAND/DAS can be implemented with or without installing the SMF exits to the operating system. Check the User Guide chapter one for the benefits of the online exits.

2. Clarify Management Philosophy

Establish or confirm what management wishes to achieve with the chargeback system. Have management answer the following questions:

- Do you want to "memo" bill some or all clients, giving an estimate of what they are spending for informational purposes only?
- Do you want to recover the total amount of the data center expenses by billing the entire client base in real or budgeted dollars?
- Do you only want to recover expenses (break even) or do you wish to make a profit?
- Will incentive pricing be used to motivate more efficient user behavior?
- Will *all* data center clients be billable or will some clients be non-billable and their expenses recovered from charging the billable clients?
- What constitutes a data center client, billable or not? (This relates closely to the next step)

3. Establish Account Code Structure

Once you decide what constitutes a data center client, you need a way to relate resource usage back to your clients. KOMAND relates all usage and charges to an “account code structure” which you define. This is typically based on organizational cost centers but sometimes includes an application or project level. Decide on a structure which will enable data center costs to be allocated back to the responsible clients in a way consistent with your management's philosophy. Define your account code structure for KOMAND with the USERDATA facility. In general, USERDATA allows up to 10 levels in your account hierarchy with a maximum of 40 alphanumeric characters. Details on USERDATA can be found in chapter two in the KOMAND User Guide.

4. Set Rates

Based on the chargeback philosophy, establish the amount of data center expenses to be recovered from the chargeback system. There is usually a general accounting or financial department either within the IT data center or in the corporate headquarters that can provide all the information needed on expenses.

- Look at the expenses for the last fiscal year and previous historical trends to decide by what percentage expenses will increase or decrease in the coming year. Be sure to take into consideration any planned expenses or downsizing. Check with capacity planning people and the data center manager.

- Break up your data center expenses into "cost pools" that can be related to the KOMAND resources you will charge for and total the dollars for each cost pool. Use of a spreadsheet program will simplify this process. We suggest starting with the four most common cost pools: CPU, DASD, Tape and Print.

- Decide on the system resources you wish to charge for using KOMAND. Try to keep things simple by limiting the number of chargeable resources, usually between 5 and 10 is satisfactory for MVS. When deciding consider the following:
    - Is it linked to a cost pool of significant dollars?
    - Is it understandable and/or explainable to clients?
    - Is the resource controllable by the clients?

- Based on the historical usage of the chosen resources and any planned changes, predict the utilization amount that will occur in the coming year.

  ***Hint*:** KOMAND can be run with sample or zero rates just to generate utilization reports.

- Now calculate the rate for a given resource by dividing the pooled dollars for that resource by the estimated utilization for that resource. Be sure the time frame for the dollars and the utilization is the same (a month, a quarter, a year). The longer the time frame the more accurate the rate.

  Hints:
  - Add 5% to your calculated rates. It is generally easier to give a credit back to your clients at the end of a period or year than it is to ask for more money out of their budgets.
  - If the financial group in your organization can, given usage information, work on calculating rates, the chargeback administrator can concentrate on the other implementation tasks.

5. Build Tables

After rates are calculated, the necessary KOMAND tables need to be built with the appropriate rates, resources and account information. The following summarizes the tables for KOMAND products:

- **KOMAND/COMMON** – KOMUSER table built from the USERDATA control statements, used to define the account structure for *all* KOMAND products. Also the common rate and billing code table can be used to input rates for all KOMAND charging products except DAS which uses the DAS Factor Table.

- **KOMAND/DAS** - Factor Table (rates and options), DASCODES table (only for account validation)
- **KOMAND/DAMS** - Dataset Name, Dataset Qualifier, Volume, Device, and SID. These are the tables used for charging DASD space and relating back to clients. Most administrators will concentrate on the qualifier table.
- **KOMAND Transaction Charging Systems** - Key-To-Account, Account-To-Code, Chargecode. (these tables are entered as control statements and built internally by each of the Charging Systems)
- **KOMAND/FMS** – FMS Master File, Activity/Credit/Debit-code and Proration.

NOTE: Some tables are optional, refer to the complete descriptions of these tables in the appropriate product reference manuals.

6. File Storage and Run Frequency

Based on the volume of data processed at your installation (primarily SMF), determine the following:

- Whether data should be processed on a daily, weekly or monthly cycle. We generally recommend setting up DAS, DAMS, Charging Systems, and FMS (up through the apply to the Master file) to run on a daily basis and the billing portion of FMS (FMSINVCE) to run on a monthly cycle. FMSINVCE will also create a download file to feed the KOMAND Information Manager (KIM) PC database.
- Whether data files should be kept on tape to save on disk space or on disk to make information more accessible and run time faster. Decide which datasets should be temporary and which should be kept as Generation Data Groups (GDGs). We generally recommend keeping the daily and monthly Resource Utilization files (RESUTIL) as GDGs.

7. Setup Jobstream

Create the execution JCL for your daily, weekly and monthly job cycles allocating the necessary datasets as decided on in the above step. Sample datasets are allocated during the install. See the User Guide on Run Frequency (chapter one) for a list of the KOMAND JCL jobstream procedures by product.

8. Memo Billing

When all tables are built and JCL tested, the jobstreams can be moved into a job scheduler to be run automatically on a daily, weekly or monthly basis. Some steps will need to be setup so they don't run if the previous step fails. Return codes for jobs and certain reports should be monitored each time the cycles are run. We recommend running the system in a state of what is known as “memo” billing where invoices and/or other reports are distributed but clients are not yet held responsible for the dollars. This is done for a period you deem necessary to accomplish the following:

- Allow clients to become familiar with the bills they will be getting and get questions answered before the system is in production.
- Allow time to implement data collection controls for SMF and any other log data being used and establish procedures for updating KOMAND tables when new USERIDs or account numbers are added to the system.
- Give the chargeback administrator time to track the recovery of expenses and fine tune rates and system tables.

Hints:

- Check in the appropriate product guide when you have a question. If you can not find the answer in a short period of time, then call the PACE Customer Service Group at (703) 369-0765 or by email at staff@pace.com.
- Install and explore the ISPF menu system and/or KIM, particularly for building and maintaining tables and try using KOMAND/DIS online for ad-hoc reporting.
- Establish a help desk phone number for clients to get questions answered. Print the help number and any other general information message on the invoice. This is an option in the FMSINVCE program in KOMAND/FMS.