Software Product Description

PRODUCT NAME: **RTM Routine Transaction Management, Version 2.0.2**   **SPD 43.02.01**

DESCRIPTION

RTM (Routine Transaction Management) is Digital Equipment Corporation's application framework for addressing routine transactions of financial branch offices in the SCO™ UNIX® /MS® -Windows™ open environment.

RTM Version 2.0

RTM reduces the cost of developing routine transactions in the branch environment by using a ready made framework for building the application, a standard architecture, and industry standard systems. By reducing project risk, speeding up implementation, and increasing the probability of successful projects, it is a head start for branch automation projects. Either alone or with Digital Services, RTM enables banks to implement routine transactions quickly and easily.

The framework includes a ready-made infrastructure to be used in a project as supplied, or modified to meet the bank,s needs. It also includes many functions to help branch staff work effectively. Banks can develop new transactions to fit their existing host systems quickly with RTM's transaction development tools and the development tool TFM (Task Flow Management).

Ready-made Infrastructure

Architecture

RTM is a true client-server application, enabling efficient use of system resources.

The client acts as the interface between the staff member and the system, presents information and validates data entry. The client module performs specific transaction dialogue handling for the staff member. Client functions include the following:

- User dialogue

- Data entry validation

- Menus

- Quick selection for experienced tellers

- Language choice. RTM supports multiple languages; each staff member can choose their preferred language on the fly. RTM is fully prepared for translation but is supplied in English.

- MS-Windows help texts can be customized to guide branch staff in accordance with the bank's organization and procedures.

- Print Layout Formatting (with ASL, see this SPD's System Support Addendum for more information)

Servers process and access information upon request from the client. The server module includes common service facilities for multiple client applications. Server functions include the following:

- Transaction processing

- Device support

- Host communications

- Electronic journal

- Authority system

- Off-line store and forward.

- Database access

RTM Development Environment

Modular structure, customization tools, and open architecture make it possible to adapt existing standard functions in RTM to bank-required formats and to add new functionality quickly.

Prototype method

TFM allows interactive design and test of screen and print components, print layouts, and transaction flows. The changes become available immediately, without recompiling, for developers and branch staff to discuss on the spot. This prototyping approach not only saves time and money, it provides an environment in which Data Processing staff and branch staff can work together effectively during the requirements specification and customization phases.

Customization

RTM contains the following tools for modification and extension of the standard application framework.

- *Menu System Maintenance*

    The menu system maintains transaction formats and defines dynamic menus.

- *Message Text Creator*

  The message text creator separates all visible information outside the TFM Data Section, such as message and push button text from the application, facilitating translation and customization.

- *Transaction Flow Creator*

  The transaction flow creator is an optional tool used to set up templates for transactions with the same information flow. Using uniform templates for transactions simplifies development and maintenance of the application. *Service Call Generator*

  Each transaction includes one or more service calls to the application server.

  The service call generator can build new service calls using functions in the application server. Existing or new functions can be used and re-used. Existing or new information fields can be passed with the service call.

Template Transactions

RTM financial transaction templates include savings and current accounts with passbooks and checkbooks, foreign exchange, debit and credit memos, in-clearing items, floats, holds, remittances (wire transfers of funds directly from the account), and teller and branch totals. Transactions for account statements, status inquiries, bank customer information, and inter-account transfers are included as well.

These templates are intended for demonstration purposes only. They give an indication of how financial transactions can be realized in screens, printouts and user interface. All financial transactions have to be adapted to reflect the information exchange with the host application used in a specific project.

Host Communication

Host dependent functions require communication to the host for successful completion. If the host goes off-line, the host dependent functions can be stored for later forwarding when the host comes on-line again. Host dependent functions can be filtered so that only those absolutely requiring host confirmation (withdrawals, for example) will be sent to the host, while those that can safely wait (deposits, for example) will be stored for later forwarding. The behavior of each transaction and its associated teller limits in these (on-line, off-line, off-load), branch open, and branch closed statuses can be separately defined.

The application level interface to host communication makes tailoring information exchange with the host easy. RTM can quickly replicate the current branch system's interface to the host.

Transaction Security

RTM ensures that transactions are completed. All completed transactions are logged in the Electronic Journal. The host response to the transaction can be logged in the Electronic Journal. When the host goes off-line, there will sometimes be one uncertain transaction, since it was sent to the host but not acknowledged. When the branch goes on line again, the branch must check if that transaction was in fact completed or not. Off-line transactions are stored in the off-line file, which can be forwarded from another branch.

Staff Productivity tools

RTM includes many features that increase staff productivity by decreasing training times, shortening transaction times, and helping reconcile the cash box and totals at the end of the day.

Transaction Access

Menus are created dynamically, so only those choices available to the current staff member at the current time within the defined limits are displayed.

For inexperienced tellers, menus reduce training time dramatically, while more experienced tellers can use hot keys or transaction codes to access transactions directly, bypassing the menus.

The menu system can be customized to allow transaction activation from the action bar, via lists or push buttons. The same transactions can be included in different menus, or all transactions can be included in one menu.

RTM does not require a mouse.

Off-line Consolidation

If the host system allows, tellers can input one transaction after another without waiting for host confirmation for every item. This feature is useful when depositing large batches of checks, for example.

Chained Transactions

One transaction can start from inside another. For instance, if a bank customer wishes to make a withdrawal from the current account for more than the available balance, an inter-account transfer can automatically be started from inside the withdrawal transaction to move funds from the savings account to the current account. A transfer large enough to cover the deficit in the current account can be suggested. When the inter-account transfer is complete, the teller is returned to the original withdrawal transaction with an updated current account balance.

Integrated Calculator

Tellers can use the MS-Windows pop up calculator, then refresh the total into an RTM field.

Shared Printers

A printer may be shared between workstations. When a printer is busy or breaks down, vouchers, passbooks and other documents can be rerouted to any other configured teller printer.

Each workstation is a different distance from each printer. It takes a different length of time for the teller to get from the workstation to the printer and insert the document to be printed. RTM allows printer time-outs to be adjusted per workstation.

Floating Tellers

A floating teller has no permanently assigned workstation but instead brings their cash box to a currently available workstation. If a teller works at one workstation in the morning and another in the afternoon, RTM keeps track of the cash totals for their cash box. Since the total is kept per teller, not per workstation, the teller only has to settle out once at the end of the day, saving time. As an alternative, totals can also be kept per workstation.

Teller Totals

RTM can keep track of any number of teller totals. Balances can be defined, via arithmetic, from the totals.

Totals are defined in RTM's development environment. For example, they can be defined per currency, per teller or workstation, per day, per batch, etc.

American Style Batch

A number of completed transactions or a time can trigger an American style batch to be pulled. For instance, after 25 transactions, the teller is prompted to take the paper journal, wrap a rubber band around it and the checks and other paperwork they have generated, and pass it to the back office. Batch totals are held separately from whole day totals.

Foreign Exchange

Any number of currencies can be defined, with all allowed denominations. Foreign currencies are convertible to local currency and vice versa. The effect of foreign currencies on teller and branch totals is fully flexible.

End-of-Day Settlement Tool

RTM facilitates end of day settlement. For each denomination of each currency, the teller fills in either how many items or the total value. RTM calculates the missing number and the total value per currency.

Electronic Journal

The electronic journal, or audit trail, contains a complete record of transactions executed by tellers. It includes a sophisticated select capability. Once the transactions are selected, they can be totaled or printed. Transaction reversal is supported.

Split Day Processing

Banks are often open "after hours", on weekends, or holidays. RTM accommodates longer opening hours, by separating calendar day from the day transactions are processed, allowing individual tellers to close for the day and then reopen for the next processing day without changing the calendar day, and so on.

Branch Administration

RTM includes many functions necessary for managing a branch, described below. MS-Windows help texts describe how to use each function and its effects.

Authority Groups

Staff is grouped by their authority levels. Each group is permitted to perform a defined set of transactions within defined limits. The authority groups allowed to perform each transaction are defined for each branch status (on-line, off-line, off-load, branch open and branch closed) and workstation types.

Override Handling

Overrides, or "permissions" to exceed certain exception conditions, such as teller limits or changed fixed charges, are also part of the authority system. An example of this is performing a withdrawal that exceeds the tellers cash-out limit. RTM allows authorized supervisors to handle overrides at the requesting tellers workstation or remotely from their own workstation. To assist tellers in finding an authorized supervisor, RTM provides a list of logged on staff with the required authority. The supervisor can examine all details of the transaction at their own workstation before handling the override.

It is also possible to send an override request to a workstation running MS-Windows. An icon or if that is not possible, a beep and a blinking screen will catch the supervisors attention and they can logon to RTM and handle the override.

Staff and Security Administration

Administration transactions add new staff, assign staff to authority groups, each with its own set of privileges, and maintain passwords and staff limits.

Configuration Administration

Configuration administration manages printers available, individual workstations, exception conditions and the authority to perform transactions to sub transaction level. For instance, tellers in one authority group may be able to sell stock holdings, while others may only inquire about their current value.

Branch Cash Position in any Currency

Branch totals for each foreign currency give branch inventory levels and exposure to exchange rate fluctuations.

Branch and Teller Totals

Branch totals give an overview of cash movement for the branch and for individual staff members. Of course, any instrument of value can be tracked and totaled, not only cash.

HARDWARE/SOFTWARE REQUIREMENTS

This version of RTM is prepared for integration with Client Relationship Management, CRM.

Refer to the System Support Addendum (SSA 43.02.01-x) for availability and required versions of prerequisite and optional hardware/software.

ORDERING INFORMATION

Software Licenses:
    RTM Client Windows: QL-0B8AW-AA
    RTM Server SCO: QL-0B9AW-AA

Software Media and Documentation: QA-0B8AA-HB

RTM Distribution Package: QB-0BAAA-AA
(Includes one RTM Client Windows License, one RTM Server SCO License, and one RTM Client/Server RX23 Kit.)

For large volumes, license packages (QP-008AA-**) are available. These packages contain one server license per five workstation licenses and are defined for project sizes up to 10,000 workstations.

*   Denotes variant fields. For additional information on available licenses, services and media refer to the appropriate price book.

The following documentation items are also available separately.

RTM Installation Guide	AA-PTFDB-TE
RTM Programmers Reference Manual	AA-PTFCB-TE
RTM User's Guide	AA-PTFBB-TE

The User's Guide is a template for projects to use when producing their own documentation. It describes the transactions as delivered in standard RTM.

The User's Guide is also delivered in revisable format as part of the developers kit.

SOFTWARE LICENSING

This software is furnished under the licensing provisions of Digital Equipment Corporation's Standard Terms and Conditions. For more information about Digital's licensing terms and policies, contact your local Digital office.

INSTALLATION

Digital recommends that a customer's first purchase of this software product include Digital Installation Services. These services provide for installation of the software product by an experienced Digital Software Specialist.

For subsequent purchases of this product, only experienced customers should attempt installation. Digital recommends that all other customers purchase Digital's Installation Services.

SOFTWARE PRODUCT SERVICES

A variety of service options are available from Digital. These include project services which are available to design and implement custom banking solutions.

Service offerings for this product which include telephone or electronic assistance, will be available during the normal business hours of the local DIGITAL office (typically, Monday through Friday, 8AM-5PM dependent on country resources), excluding locally observed DIGITAL holidays.

For additional information contact your local Digital office.

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System
Support
Addendum

PRODUCT NAME: RTM Routine Transaction Management,   **SSA 43.02.01-A**
Version 2.0.2

HARDWARE AND SOFTWARE REQUIREMENTS

PC Environment

Hardware Requirements:

- Industry Standard PC and communications board as supported by TFM 3.1 (SPD 44.19.xx)

- Primary memory: Minimum 4MB memory

- Secondary memory: Minimum 40MB required

Software Requirements:

For Development

- MS®-Windows™ Version 3.1

- MS-Windows Software Development Kit and MS-Word to create help texts.

- TFM Development, Version 3.1 (SPD 44.19.xx)

- ASL Device, Version 1.1 or later (SPD 43.00.xx)

- SMB Redirector Version 6.0.1

For Runtime

- MS-Windows Version 3.1

- TFM Doc Version 3.1 (SPD 44.19.xx)

    To change menus with the menu system maintenance transaction in runtime, TFM Development 3.1 is necessary.

- Parts of ASL Device Version 1.1 or later (SPD 43.00.xx) as needed, including:

    - Device Access Manager: QL-0B1AW-AA

    - Teller Printer UPS: QL-0AXAW-AA

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Server Environment

Hardware Requirements:

- Industry standard PC as supported by SCO™ UNIX®. Consult the *DECbank FBS Configuration Guide* for sizing.

- Primary memory: 8 MB recommended for a 2 workstation branch configuration, 16MB recommended for a 4-5 workstation branch configuration, up to 32 MB recommended for more than 5 workstations but less than 16. Communications board as supported by TFM.

- Secondary memory: 426 MB disk recommended for a 4-5 workstation branch configuration

Software Requirements:

For Development

- SCO UNIX v/386 Development System including Microsoft® C Compiler R3.2 Version 4 (SPD 32.52.xx, European SPD 33.31.xx)

- TFM Development Version 3.1 (SPD 44.19.xx)

- ASL Communication Version 1.1 or later (SPD 42.99.xx). (Not required in an RTM standalone demonstration configuration.)

Database

- INFORMIX-ESQL® Version 4.10

- ASL Database Version 1.1 (SPD 43.01.xx)

- INFORMIX-SQL® Standard Engine Runtime Version 4.10 or
  INFORMIX-Online® Runtime Version 4.10

For Testing the Runtime Environment

- C-ISAM Version 4.10 or
  INFORMIX-SE® Runtime Version 4.10 or
  INFORMIX-OnLine Runtime Version 4.10

For Runtime

- SCO UNIX v/386 R3.2 Version 4 (SPD 32.52.xx, European SPD 33.31.xx)

- Parts of ASL Communication Version 1.1 (see SPD 42.99.xx) as needed, probably:
  SNA Transaction Server: QL-0AUAW-AA
  TFM Doc Version 3.1 (SPD 44.19.xx)

Database

- C-ISAM Version 4.10 or
  INFORMIX-SE Runtime Version 4.10 or
  INFORMIX-Online Runtime Version 4.10

GROWTH CONSIDERATIONS

The minimum hardware/software requirements for any future version of this product may be different from the requirements for the current version.

DISTRIBUTION MEDIA

RTM is distributed on UNIX formatted 3.5-inch DSDD diskettes.

ORDERING INFORMATION

Software Licenses:
    RTM Client Windows: QL-0B8AW-AA
    RTM Server SCO: QL-0B9AW-AA

Software Media and Documentation: QA-0B8AA-HB

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RTM Programmers Reference Manual	AA-PTFCB-TE
RTM User's Guide	AA-PTFBB-TE

Packages for Runtime Installation:

Please order the QP- package which best fits the size of your installation. Extra single licenses for workstations and servers are available.

The above information is valid at time of release. Please contact your local Digital office for the most up-to-date information.

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