



ASSET.PRO

Product Overview

www.hash.sd



ASSET.PRO

Product Overview

Address: Building No.16 Near Haj Noor Mosque
60 Street MAAMORA, KHARTOUM, Sudan
Tel: +249-912336908 / +249-900063097
Email: info@hash.sd



Table of Contents

Title	Page
1. About ASSET.PRO	4
2. Benefits of ASSET.PRO	4
3. ASSET.PRO FEATURES.....	5
3.1 General Features.....	5
3.2 Operational Features.....	7
3.2.1 General Operational Feature.....	7
3.2.3 Ad-hoc Queries.....	7
3.2.4 Customizable Messages	7
3.2.5 System-wide standard user interface.....	8
3.2.6 Switching between functions.....	8
3.2.7 Parameterized Reporting	8
4. TECHNOLOGY / ARCHITECTURE.....	9
4.1 Open System Design.....	9
4.2 Web Enabled Architecture.....	9
4.3 Centralized Database Deployment.....	9
4.4 Schematic Representation of Distributed / Centralized Database Deployment.....	9
4.5 Single Site Environment.....	7
4.5.1 Single Server holding Database as well as Application.....	9
4.5.2 Single Database and Multiple Application Servers.....	10

Table of Contents

Title	Page
5. SECURITY.....	10
5.1 Security Access Control	10
5.2 Password: The Basic Level of Security.....	10
5.3 Auto Log-Off After Certain Interval of Inactivity.....	11
5.4 Database Level Security.....	11
5.5 Functions / Sub-Function Level Access Control.....	11
5.6 Control of Access.....	11
5.7 Application Access Monitor.....	12
6. THE SYSTEM AUDIT CAPABILITIES	12
6.1 Maintaining Date / Time Stamp and User Id.....	12
6.2 Access Log.....	12
6.3 Log of Inserts & Modifications.....	12
6.4 The System Data Backup and Recovery Mechanism.....	13
7. SYSTEM SPECIFICATION.....	14
7.1 Technical Details.....	14
7. SAMPLE SCREEN.....	15

1. About **ASSET.PRO**

With **ASSET.PRO** make the best use of all your IT and non-IT assets by recording and tracking them in one place. Centralize information on all workstations, software, hardware, and licenses, and track assets and their changes with automatic, periodic updates. Predefine custom statuses for assets, automate periodic scans on individual assets and stay updated on the status of each asset.

2. **ASSET.PRO** Benefits



Track All Assets

Maintain an inventory of all IT and non-IT assets, including workstations, hardware, and software.



Organize Inventory

Organize your inventory with fine-tuned classifications like asset types and product types.



Discover Assets Through Different Modes

Enable assets to be discovered through different modes, such as agents, Windows/network scans, and barcodes.



Secure Access

Enable assets to be discovered through different modes, such as agents, Windows/network scans, and barcodes.

3. ASSET.PRO Features

3.1 General Features

The asset management module can be used to manage or track assets where users will be provided with their unique username and password and each asset will have its unique barcode given by the administrator. The administrator adds items and their details including their quantity and location. The administrator performs movements' procedures of assets, so by that, you can manage and track your assets and know where and how it is distributed.



Comprehensive

1

ASSET.PRO provides a comprehensive set of functions that offer a wide range of administrative, financial and decision support sub-system facilities



Modular

2

ASSET.PRO application is modular in design, with each module addressing specific functional requirements. **ASSET.PRO** allows phased implementation of modules based on the organization priorities. Modules can be implemented in a standalone mode and later integrated to the other relevant modules as the implementation progresses.



Integrated

3

ASSET.PRO application design provides for seamless native integration across the modules within a suite or across the suites as relevant. The modules implemented in a gradual modular fashion ultimately integrate into a cohesive system providing for a single central data repository.



Maintainability

4

All system modules are designed, developed and documented as per accepted standards, allowing for easy maintenance of the system.



Data Security

5

ASSET.PRO allows data setting to be accessed only by authorized personnel, thus ensuring appropriate data security and confidentiality.

3.2 Operational Features

3.2.1 GENERAL OPERATIONAL FEATURES

- Record IT and non-IT assets, scan and discover new assets and update the inventory automatically.
- Discover assets using multiple discovery techniques, agent scans and barcodes.
- Stay on top of any changes through periodic, automated asset scans.

3.2.2 BROWSER INTERFACE

ASSET.PRO supports a web-enabled user interface (WUI) with the application working on Internet Explorer. This usher in the much-needed ease-of-use and simplicity of usage. Users familiar with Internet usage - the ubiquitous email concepts, Office Automation tools, access to e-reference sites, can get quickly adapted to the **ASSET.PRO** functionality.

3.2.3 AD-HOC QUERIES

The organisational environment is dynamic and demanding. The information needs of statistics could vary considerably. Hence, users need extensive facilities to extract data and manipulate them in an easy and quick manner. Using Crystal reports and related Query tools, users would be able to extract the requisite data / information by means of user-definable queries.

3.2.4 CUSTOMIZABLE MESSAGES

The errors and warning messages are stored in tables that can be customized if required. Messages can also be maintained in the local language for ethnic users.

3.2.5 SYSTEM-WIDE STANDARD USER INTERFACE

The method of operations/navigation is uniform and standardized across the system for ease of usage.

The user interface is consistent throughout the system so that the user gets the same look and feel. All functions of **ASSET.PRO** follow the same standard for defaults of various types, help functions and display and correction of errors. The exit functions also follow a similar interface depending on the nature of the exit.

- Date and user name is displayed along with the Organization name at the same location across all screens & modules.
- Standard displays.

3.2.6 SWITCHING BETWEEN FUNCTIONS

System allows user to 'suspend' a task currently being performed and invoke another associated function. The user can activate a Background Menu from any of the functions to shortcut the navigation process through the Menu Tree. This allows the user to access frequently used screens while using a particular function.

3.2.7 PARAMETERIZED REPORTING

Reports allow a wide range of selection criteria and sort parameters, where applicable.

4. TECHNOLOGY / ARCHITECTURE

4.1 Open System Design

ASSET.PRO also supports the standard network infrastructures such as:

- Standard Cabling with UTP, fiber optic, etc.
- LAN or WAN with leased line or dial-up network
- Intranet / Internet (ASP version of EDU.PRO is in the pipeline)

4.2 Web Enabled Architecture

ASSET.PRO supports Web enabled architecture. This architecture enables the deployment of **ASSET.PRO** on 3-tier architecture in Intranet mode within a LAN or WAN.

4.3 Centralized Database Deployment

Under this methodology, **ASSET.PRO** database would be maintained centrally covering multiple organization sites.

4.4 Schematic Representation of Distributed / Centralized Database Deployment

The deployment methodology of **ASSET.PRO** will depend on whether the organization comprises of a single or a multi-site infrastructure (a set of organization sites).

4.5 Single Site Environment

If the organization is a single site, **ASSET.PRO** deployment can be on Client-Server deployment architecture as per the following options:

4.5.1 Single Server holding Database as well as Application

The establishment can have a single server with all the clients connected through the network infrastructure. The single server will hold the SYSTEM database as well as the SYSTEM application objects. The clients will have Developer runtime components only

4.5.2 Single Database and Multiple Application Servers

In this scenario, the establishment will have one server holding the entire THE SYSTEM database centrally. The SYSTEM application could be distributed, either individually on multiple application servers or can be located on a common hard disk, shared by multiple application servers. The number of application servers will depend on the size of the establishment in terms of the spread of the departments. All the clients will have only the Developer runtime components and would be connected through the network infrastructure.

5. SECURITY

5.1 Security Access Control

This section describes in detail the various system-wide security measures incorporated into the SYSTEM application across different levels. According to the inherent design of **ASSET.PRO**, the security system underlies and forms the basis for the entire application in a global manner.

5.2 Password: The Basic Level of Security

Every user of the application system will need to be identified and allocated a unique user-identification that forms the key for identifying a user. Each user will be associated with a secret password for accessing the system. This password will never be displayed on the screen nor will it be accessible from the database directly by unauthorized users due to the encryption mechanisms.

Authentication of the user password forms the basis for user identification. Based on this verification, the system allows further access to the system. The system provides following standard facilities in conjunction with the OS / RDBMS security systems:

Password Change

In addition to the password expiry based on elapsed number of days, system also allows user to change password as and when required.

System provides an appropriate screen function for changing the password upon submitting the original password.

5.3 Auto Log-Off After Certain Interval of Inactivity

ASSET.PRO ensures that the application logs off after a certain time interval of inactivity on the user terminal. This will prevent possible misuse of the system.

5.4 Database Level Security

ASSET.PRO security concept is built on RDBMS database security concepts. Each user of the application has to be defined internally as the RDBMS database user. Based on this, it is determined what tables the user would have access to. If required, access can be controlled even up to the row level. The system facilitates controlling standard database operations (i.e. insert, update, delete, query and print) based on the role assigned internally to each user at the database level.

5.5 Functions / Sub-Function Level Access Control

ASSET.PRO consists of different kinds of standard functions distributed across modules. These functions are correlated to the build-up of the menus within the application. Within these functions, there can be several sub-functions considered as sub-menus. Corresponding to each of the menu items or the sub-menu items, one or more standard functions (insert, update, delete, query or print) may be associated through the appropriate program/function/object (forms, reports, graphs, etc.). **ASSET.PRO** will enable or disable a menu item or a sub-menu item corresponding to the roles, responsibilities and operating unit access controls.

5.6 Control of Access

System allows pre-defining a System Administrator and a Menu Administrator associated with certain pre-defined responsibilities and access rights which are normally above the level of all other users.

5.7 Application Access Monitor

All the application access sessions are continuously monitored by a separate background monitoring function to ensure that permissions for access are valid, based on the restrictions of sign-on day and the sign-on time ranges.

6. THE SYSTEM AUDIT CAPABILITIES

ASSET.PRO provides for a system-wide audit control mechanism inbuilt by design.

6.1 Maintaining Date / Time Stamp and User Id

ASSET.PRO captures and maintains the unique user identification, the date and the time against every transaction entry. Based on these details, Audit reports can be generated for verification purposes.

6.2 Access Log

ASSET.PRO has extensive inbuilt security and access control mechanisms. Based on this, **ASSET.PRO** keeps track of the various functions accessed by any users.

6.3 Log of Inserts & Modifications

THE SYSTEM application maintains a comprehensive log of various activities such as record inserts and the changes carried out in the data by any user. This is determined by the activation of application level (global) parameters corresponding to the required modules where the system needs to maintain a dynamic log of inserts and updates. The system is capable of maintaining the audit trail of the record inserts, the record deletes (if any) and the updates in terms of pre as well as post changes, corresponding to the relevant functions.

6.4 The System Data Backup and Recovery Mechanism

Frequent and regular, full or partial, database backups are essential for any recovery mechanism. The frequency of backups should be related to the frequency of data changes that are being performed. Since the organization database will inevitably get changed at a high rate, database backup frequency should be proportionately higher – monthly, weekly and daily. Minimal loss of data in the event of a problem due to the on-line transaction-processing environment should be the ultimate aim. **HASH TECH** recommends an online backup system to be in place so as to ensure that database backups are taken without human intervention and without disrupting the routine front-office activities.

To ensure that archiving and backup procedures are reliable, **HASH TECH** recommends that recovery tests be conducted on a regular basis. This would also help the IT personnel to become familiar with recovery procedures and avoid costly mistakes in a real-time disaster recovery scenario.

7. SYSTEM SPECIFICATION

7.1 Technical Details:

- **Application Type:**
 - Extranet Web-based system and Windows forms
- **Used Technologies:**
 - ASP.NET
 - ADO.NET
 - AJAX
 - Crystal report
- **Programming Languages:**
 - C#.
 - PLSQL
 - JavaScript.
 - CSS.
 - HTML/DHTML
- **Database Engine:**
 - Microsoft SQL Server.
- **Tools:**
 - Visual Studio.NET
 - Dream weaver.
 - Microsoft Visio.
 - Adobe Photoshop CS2.
- **HW & SW requirements:**
 - Normal LAN.
- **Minimum Server Requirements:**
 - 200GB free disk space
 - 3GB RAM
 - 1.7 Core2 Duo processor
 - IIS
 - .NET Framework 3.5
 - Crystal Report Runtime
 - SQL Server
- **Minimum Client Requirements:**
 - Web browser with java enabled plus adobe flash player.

8. SAMPLE SCREENS



