Data Access Language (DAL) Developer Issues

Article Created: 30 October 1990
Article Last Reviewed: 29 June 1992
Article Last Udated:

TOPIC --

We have some questions about the use of Data Access Language (DAL).

1) DAL can be ordered from APDA. Does this mean that there will be
   considerable development work needed when using DAL in the scheme of
   database access?

2) Using ClearAccess, how much programming and level of knowledge is needed to
   access Rdb on the VAX system? What utilities or "hooks" are available from
   DAL that will let me access Rdb via ClearAccess? Do I need to know DAL
   well before I can use ClearAccess to access the Rdb database?

3) Can our resellers just sell DAL like they do with other applications
   (like EtherTalk NB Cards, or TokenTalk NB Cards, and so on)?   From what
   I understand, it seems that DAL is a useful tool only if the person using
   DAL really understands database systems and using DAL utilities to
   extract and update the information.

4) This pertains to using DAL. If I have a 4th Dimension flat file, and
   I want to send it to the Rdb database to have it stored as an Rdb record,
   what must I do and what is the prerequisite (knowledge or
   software/hardware requirements) before I can do this transfer? Do I, for
   example, need to convert this 4th Dimension file into an Rdb-readable
   format for it to update the Rdb record?

DISCUSSION ---

1) Yes, Data Access Language is a development language, and
   development work is involved to link desktop applications to data
   processing systems on mainframes and minis. However, for commercial and
   custom developers, Data Access Language lowers barriers to entry for
   them. Thus, products and custom solutions can be developed faster/easier
   because less detailed technical knowledge is required.

   Data Access Language is often described as a standard connectivity
   language that links desktop applications to host data. It is more than

just a language; it is really a group of carefully inter-related elements. The elements are the Language, the API, and the Development Aids. Often, the user wants access to different systems without having to worry about protocols, systems, or anything else. Relational databases are becoming more popular because of their ease of use, ease of administration, and application independence. SQL language emerges as a convention for data access language adopted by relational database vendors. SQL, however, is still not a standard. DAL lets software developers create desktop applications with seamless connectivity to DP data and applications without leaving the desktop world. It handles physical network specifics, insulates the desktop application from the operating system, RDBMS, and SQL specifics.

2) The ClearAccess DAL interface provides a series of dialog boxes that let users build queries by pointing and clicking. Users do not need familiarity with all the details of DAL or SQL. End users without knowledge of programming and SQL can access the databases via the dialog boxes, which build the SQL statements for them. The amount of knowledge required really depends on how complex the database access is going to be. A background in relational databases would also help.

3) Again, it really depends on the solutions. For simple ad-hoc queries and databases updates, DAL with a HyperCard or ClearAccess interface will let end users do the job without a lot of training. For complex, customized business applications that need to take advantage of the Macintosh interface, some serious planning and design should be done. Large companies with an in-house MIS programming staff should be able to do this task.

4) You can tell 4th Dimension to export this file with certain delimiters, transfer the file to the VAX, and import it into Rdb. This can be done without using DAL. You must be familiar with the export capabilities of 4th Dimension, know how to transfer the file to the VAX, and know how to import it into VAX/Rdb.

   If this is going to be done by end users on a routine basis, please note that DAL provides 4th Dimension External procedures that let 4th Dimension applications act like CL/1 clients and create distributed applications on the Macintosh. You must know how to program 4th Dimension External procedures to export the data to the DAL server on the VAX host. You should also know how to install the DAL software on both the VAX and the Macintosh and the standard network connection between the Macintosh and VAX host.

Keywords: <None>

==

19960215 11:05:19.00

Tech Info Library Article Number: 6201