



Legac-E Education

CICS 3270 Bridge Overview

Besides providing a direct interface between itself and a WEB Browser, i.e. CICS WEB Services (CWS), CICS/TS offers a feature called the 3270 Bridge. To exploit this feature the programs themselves do not need to be changed or recompiled, but the BMS maps do need to be reprocessed.

Programmers familiar with BMS 3270 mapping will probably have used either the IBM supplied map generation procedure, DFHMAPS, or a derivative of it. This procedure has two outputs, the logical (symbolic) map which is a copy book of modifiable fields, and a physical map which is a data only load module containing the basic screen view.

To exploit the CICS WEB 3270 bridge it is necessary to use JCL procedure DFHMAPT instead of DFHMAPS. DFHMAPT produces a third output, which is an HTML version of the physical map. As supplied the procedure always runs an IEBUPDTE step to add the HTML document to a Partitioned Data Set Extended. The WEB Page can either be delivered from this location or from within z/OS UNIX System Services.

The principal difference between the BMS Map and the HTML Document arises because the WEB does not support all the AID keys supported by CICS BMS. To address this IBM include a JavaScript routine which is triggered by images of the AID keys included in the page layout. Apart from the AID key images the Browser view should be similar to the 3270 version.

The reason the application code does not need changing is that CICS itself handles the translation to and from the BMS format depending upon whether the map is being sent or retrieved.

To enable CICS as a WEB Server, using the 3270 Bridge Facility it will need a TCPSERVICE definition which identifies HTTP as the protocol, and states which TCP/IP Port the service is to listen on. It will also need DOCTEMPLATE resource definitions for the HTML documents produced by DFHMAPT.

If the CICS users are on an Intranet, i.e. inside the firewall, using the 3270 Bridge may offer a case for reducing 3270 Emulator licenses and switching to the use of a WEB Browser without any significant security risk.