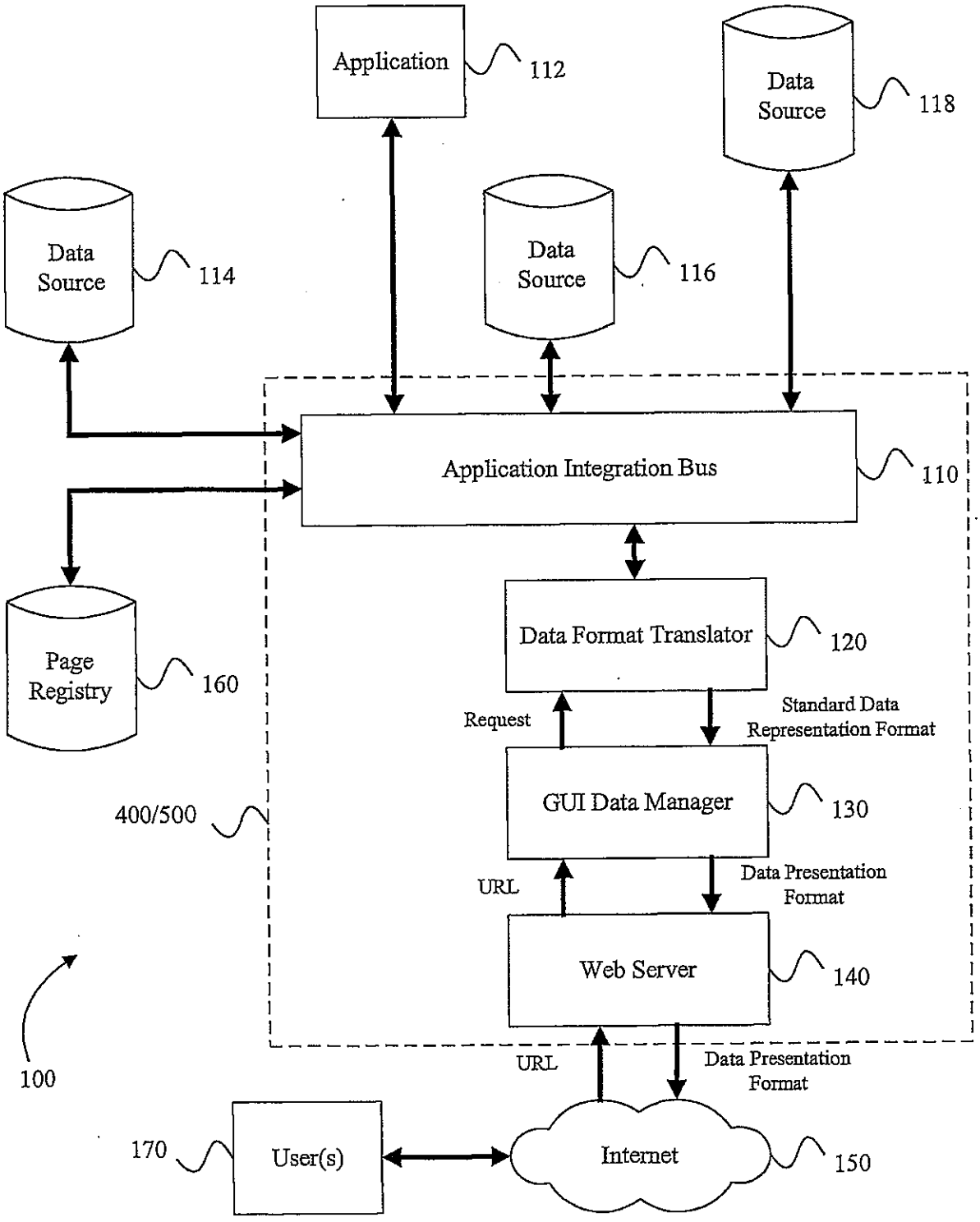

Application
112
Data Source
118
Data Source
114
Data Source
116
Application Integration Bus
110
Page Registry
160
Data Format Translator
120
Request
Standard Data Representation Format
400/500
GUI Data Manager
130
URL
Data Presentation Format
Web Server
140
100
URL
Data Presentation Format
170
User(s)
Internet
150

Figure 1A

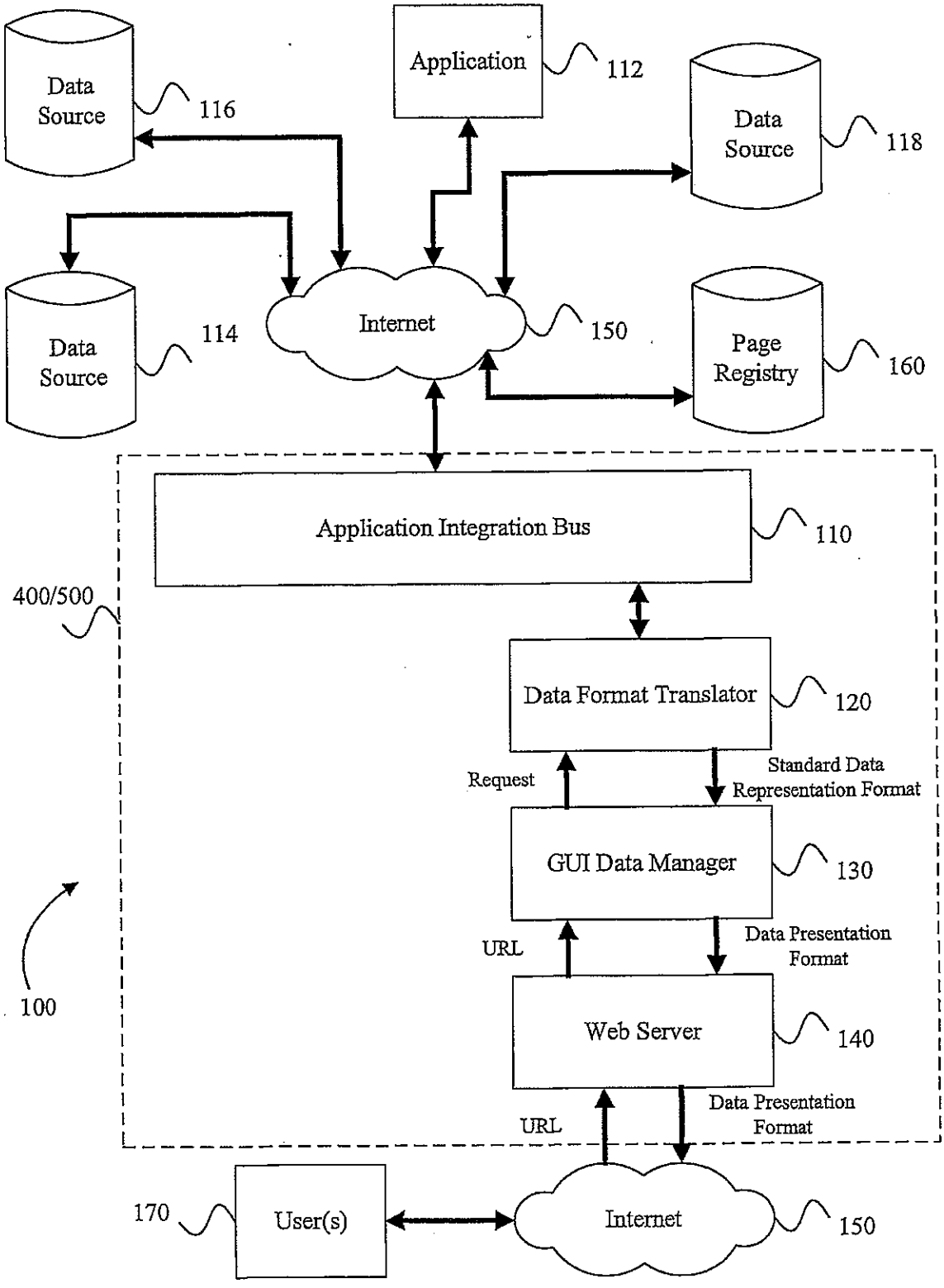

Data Source
116
Application
112
Data Source
118
Data Source
114
Internet
150
Page Registry
160
Application Integration Bus
110
400/500
Data Format Translator
120
Request
Standard Data Representation Format
GUI Data Manager
130
URL
Data Presentation Format
100
Web Server
140
URL
Data Presentation Format
170
User(s)
Internet
150

Figure 1B

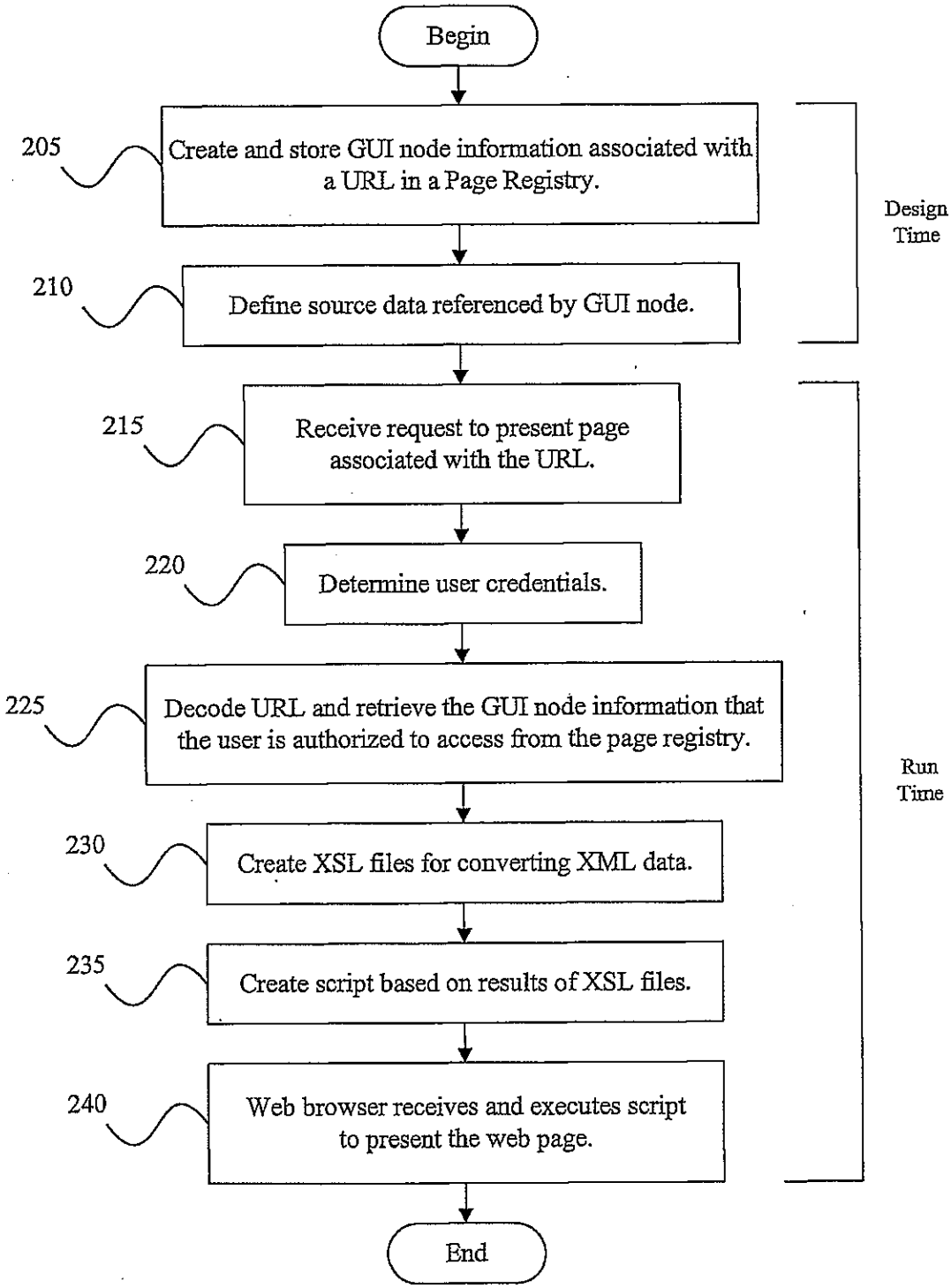

Begin
205
Create and store GUI node information associated with a URL in a Page Registry.
210
Define source data referenced by GUI node.
Design Time
215
Receive request to present page associated with the URL.
220
Determine user credentials.
225
Decode URL and retrieve the GUI node information that the user is authorized to access from the page registry.
230
Create XSL files for converting XML data.
235
Create script based on results of XSL files.
240
Web browser receives and executes script to present the web page.
Run Time
End

Figure 2

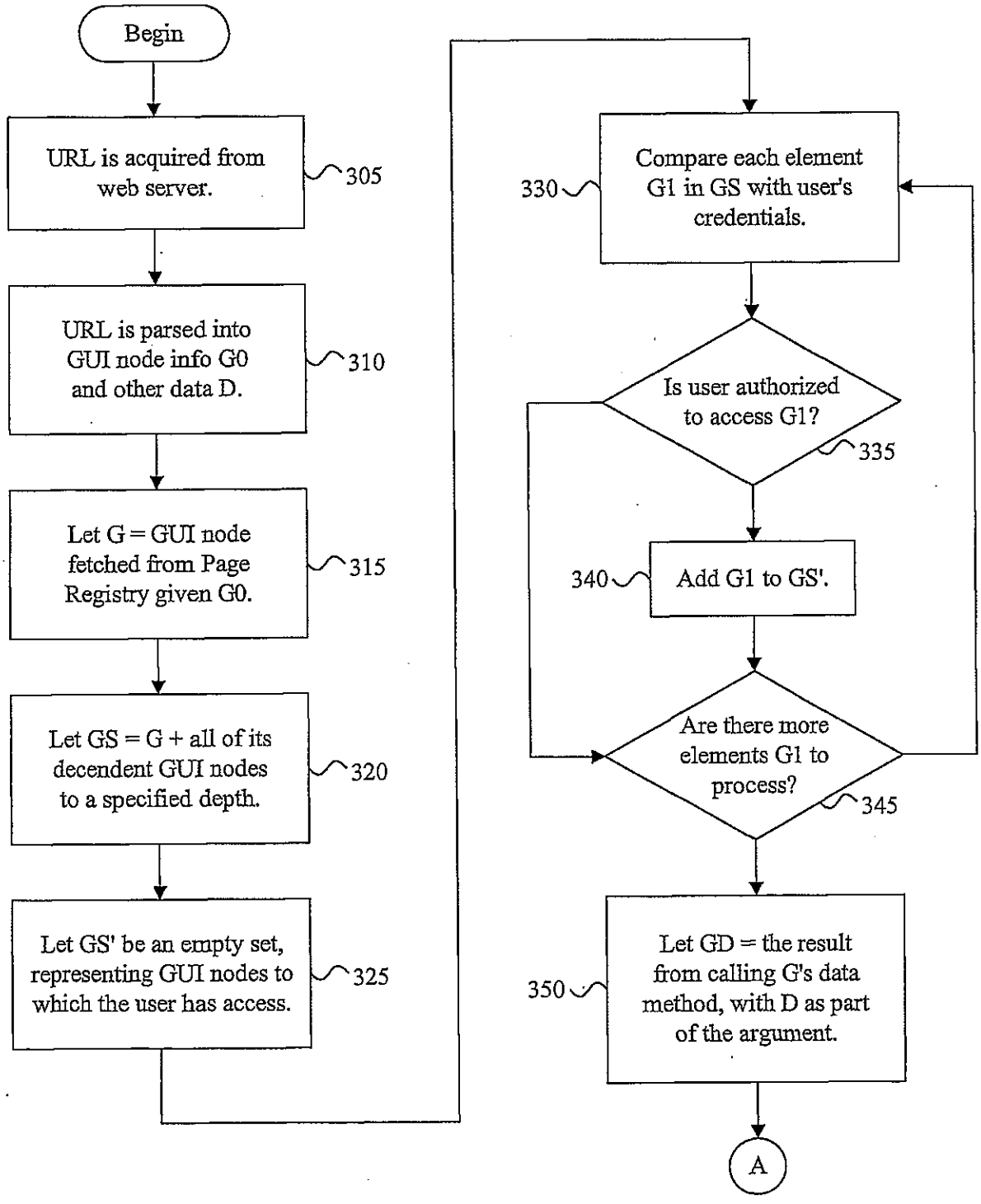

Begin
URL is acquired from web server.
305
URL is parsed into GUI node info G0 and other data D.
310
Let G = GUI node fetched from Page Registry given G0.
315
Let GS = G + all of its decendent GUI nodes to a specified depth.
320
Let GS' be an empty set, representing GUI nodes to which the user has access.
325
330
Compare each element G1 in GS with user's credentials.
Is user authorized to access G1?
335
340
Add G1 to GS'.
Are there more elements G1 to process?
345
350
Let GD = the result from calling G's data method, with D as part of the argument.
A

Figure 3A

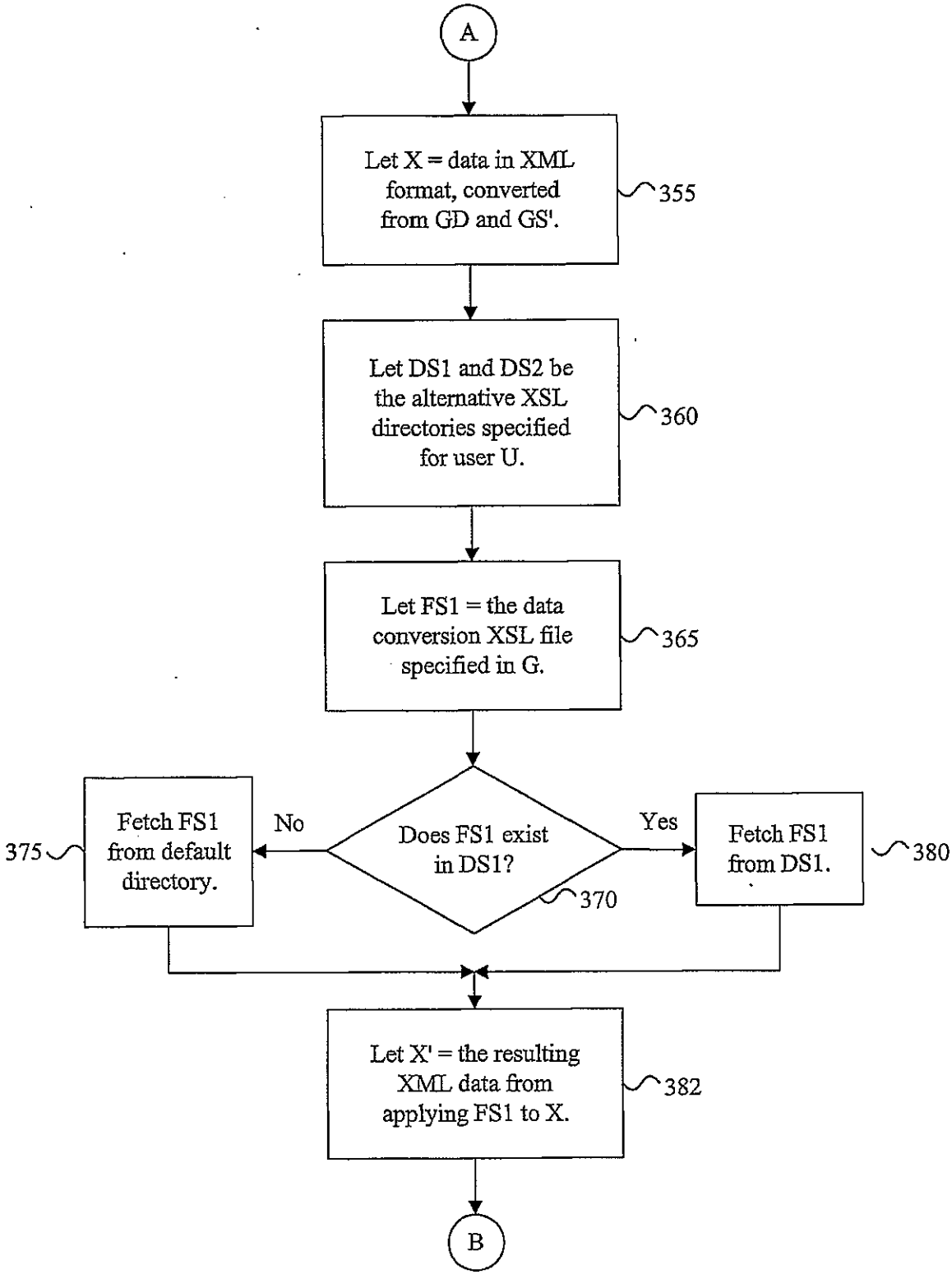

A
Let X = data in XML format, converted from GD and GS'.
355
Let DS1 and DS2 be the alternative XSL directories specified for user U.
360
Let FS1 = the data conversion XSL file specified in G.
365
Does FS1 exist in DS1?
370
No
Yes
Fetch FS1 from default directory.
375
Fetch FS1 from DS1.
380
Let X' = the resulting XML data from applying FS1 to X.
382
B

Figure 3B

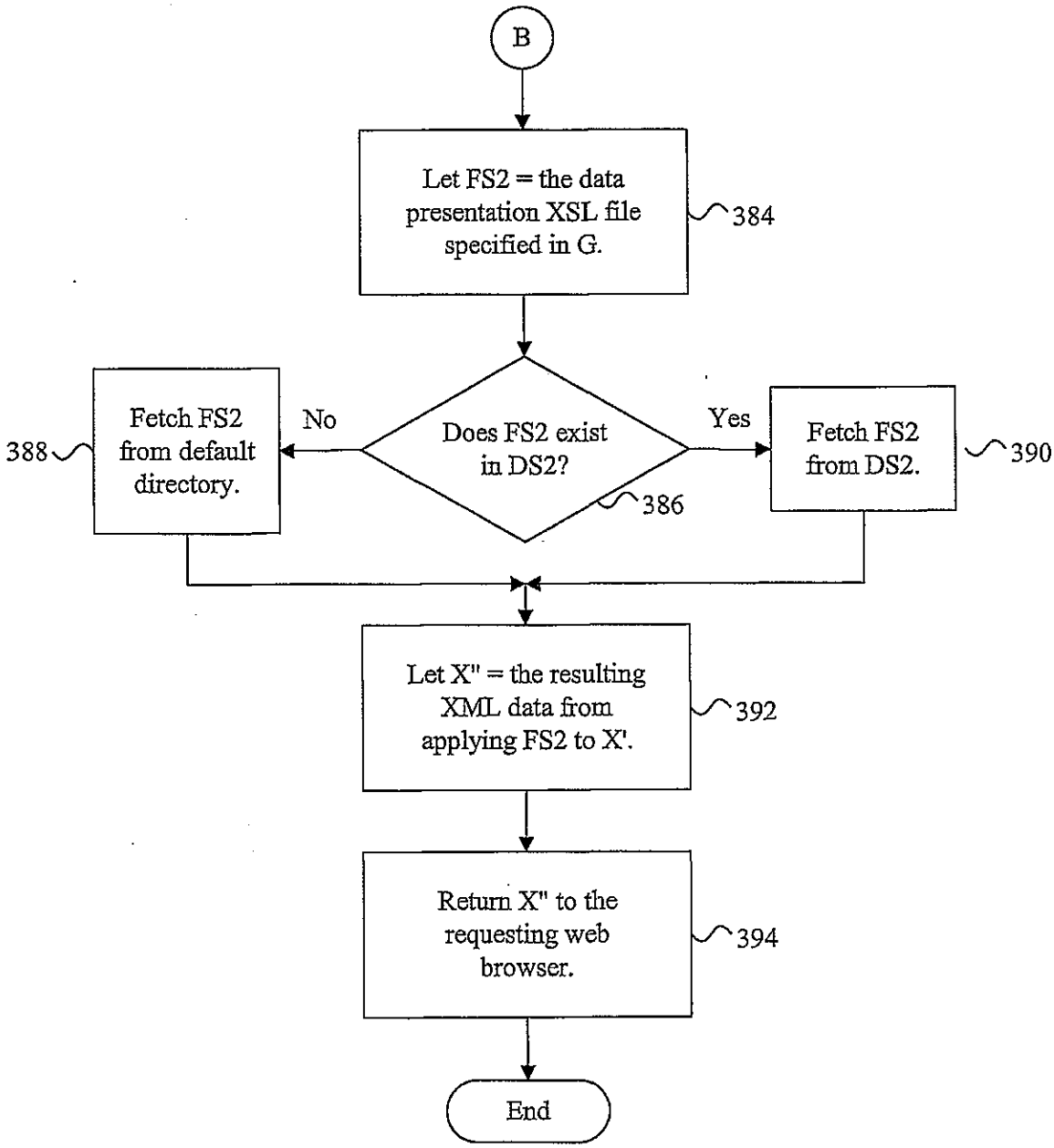

B
Let FS2 = the data presentation XSL file specified in G.
384
Does FS2 exist in DS2?
386
No
Yes
Fetch FS2 from default directory.
388
Fetch FS2 from DS2.
390
Let X" = the resulting XML data from applying FS2 to X'.
392
Return X" to the requesting web browser.
394
End

Figure 3C

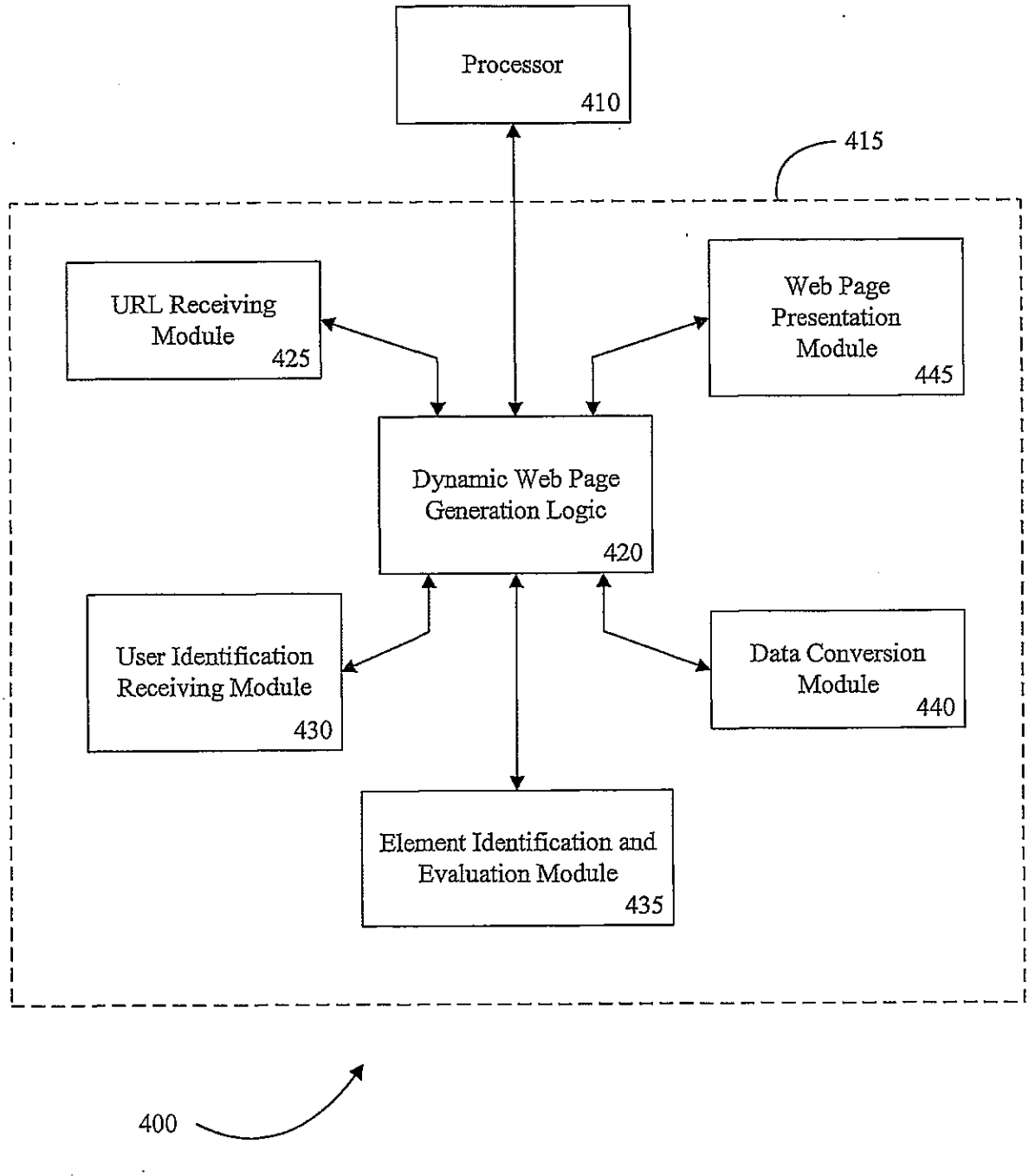

Processor
410
415
URL Receiving Module
425
Web Page Presentation Module
445
Dynamic Web Page Generation Logic
420
User Identification Receiving Module
430
Data Conversion Module
440
Element Identification and Evaluation Module
435
400

Figure 4

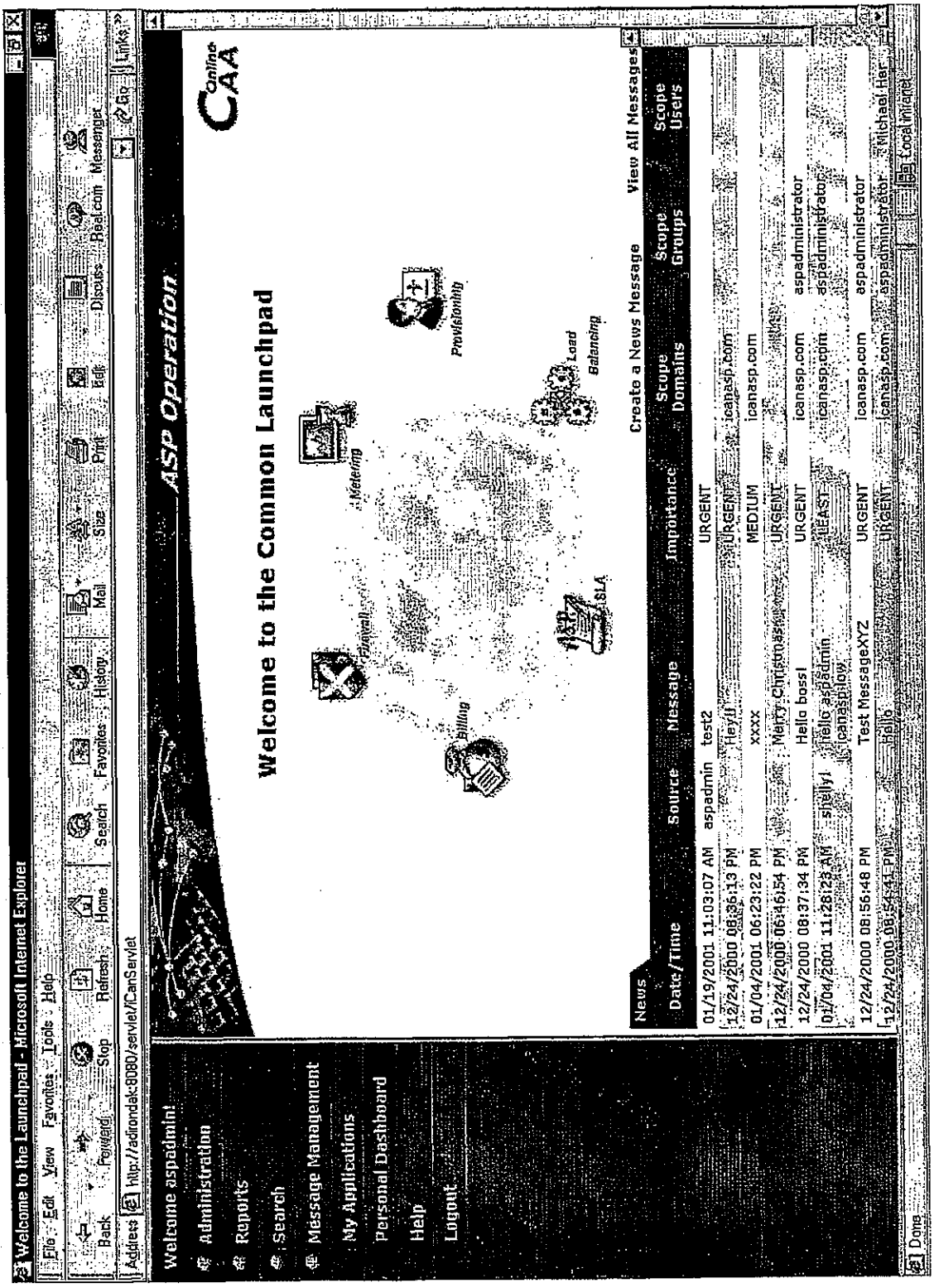

Welcome to the Launchpad - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Forward Stop Refresh Home Search Favorites History Mail Size Print Edit Discuss Real.com Messenger
Address http://adirondak:8080/servlet/ICanServlet
Welcome aspadmin!
Administration
Reports
Search
Message Management
My Applications
Personal Dashboard
Help
Logout
ASP Operation
Online CAA
Welcome to the Common Launchpad
Billing
Firewall
Metering
Load Balancing
SLA
Provisioning
Create a News Message
View All Messages
News
Date/Time
Source
Message
Importance
Scope Domains
Scope Groups
Scope Users
01/19/2001 11:03:07 AM aspadmin test2 URGENT
12/24/2000 08:36:13 PM Hey!! URGENT icanasp.com
01/04/2001 06:23:22 PM xxxx MEDIUM icanasp.com
12/24/2000 06:46:54 PM Merry Christmas URGENT icanasp.com aspadministrator
12/24/2000 08:37:34 PM Hello boss! URGENT icanasp.com aspadministrator
01/04/2001 11:28:23 AM shelly1 Hello aspadmin LEAST icanasp.com aspadministrator
icanasplow
12/24/2000 08:56:48 PM Test MessageXYZ URGENT icanasp.com aspadministrator
12/24/2000 08:54:41 PM Hello URGENT icanasp.com aspadministrator Michael Her
Done
Local intranet

Figure 5A

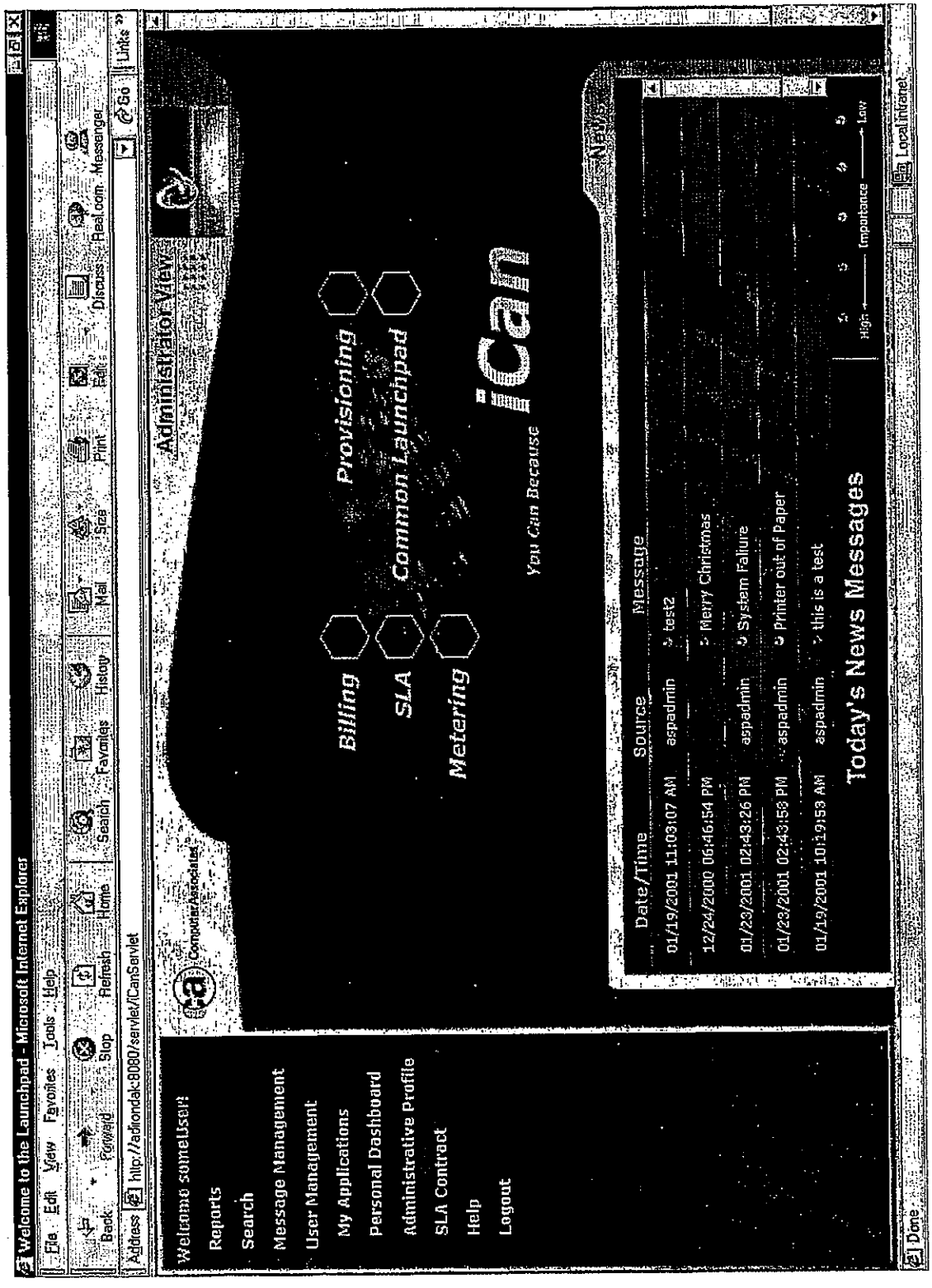

Welcome to the Launchpad - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Forward Stop Refresh Home Search Favorites History Mail Size Print Edit Discuss Real.com Messenger
Address http://adkondak:8080/servlet/ICanServlet
Links
Computer Associates
Administrator View
Welcome someUser!
Reports
Search
Message Management
User Management
My Applications
Personal Dashboard
Administrative Profile
SLA Contract
Help
Logout
Billing
Provisioning
SLA
Common Launchpad
Metering
iCan
You Can Because
News
Date/Time
Source
Message
01/19/2001 11:03:07 AM aspadmin test2
12/24/2000 06:46:54 PM Merry Christmas
01/23/2001 02:43:26 PM aspadmin System Failure
01/23/2001 02:43:53 PM aspadmin Printer out of Paper
01/19/2001 10:19:53 AM aspadmin this is a test
Today's News Messages
High
Importance
Low
Done
Local intranet

Figure 5B