

e-Business User Experience

WAVV 2002

Dan Askew

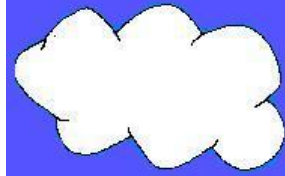
Jimmy Green

Terry Hall

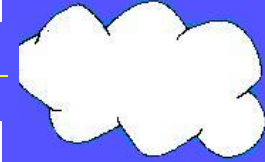
E-Business User Experience

Dan Askew

Dowling Consulting Group



E-Business Sites



Complete WEB Implementation

- Penton Publishing

Partial WEB Implementation

- CSCC (Columbus State Community College)

Minimal WEB Implementation

- Gradall Company



Penton Publishing

Complete WEB Implementation

- Publishing house for 30 magazines
- DLI/CICS based web server using DATA21 IPSERVER
- 70 In-house users using Netscape version 4.79
- Allow outside user access to subscribe real-time
- Allow Customers access to magazine statistics & data
- Implemented 24/7 access to system
- Conversion time 18-24 months



CSCC (Columbus State Community College)

Partial WEB Implementation

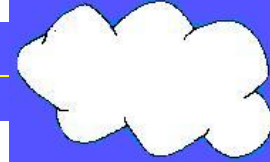
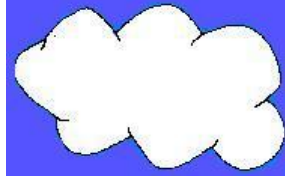
- 20,000 student enrollment
- 500 regular - up to 1600 users during peak times
- DatacomDB/CICS based WEB server using DATA21 IPSERVER
- Implemented 24/7 access time
- 45% all registrations are web based
- 10% all fees paid are web based (2.5 million this year)
- 80% all reports are web based using VSE2PDF & HTML inserts
- Above numbers have doubled from previous quarters
- Exchanging data using XML data streams with other Univ.
- Conversion time 3-4 months



Gradall Companies (JLG industries)

Minimum WEB Implementation

- Manufacturer of earth moving equipment
- WEB implemented for report distribution and limited external dealer use
- 60% of all reports are distributed via WEB or E-mail
- Allow Dealers to access system via dial-up or internet based 3270 session (IPBridge from DATA21)
- Extensive use of FTP to distribute data to network based applications
- Socket applications used for real time data exchange
- Implementation time was 3-4 weeks



Considerations

(problems that we have seen)

- Network traffic and infrastructure
- Capacity Planning
- Security and more security
- Popularity (Our baby is growing up)



Considerations - Network

- Infrastructure – Terminal/emulator based networks typically 4K packets however WEB based traffic can be unlimited size
- Internet Connection – Most companies do not have the capacity to handle both outgoing traffic and incoming traffic
- E-Mail server – Possible overload of disk space relaying problems (email outside company)
- Servers – Users may archive reports in network directories



Considerations - Capacity

- Machine sizing – Plan appropriately for machine capacity. consider the implications on CPU, DASD and hardware.
- Forecast – Investigate the project, speak to others who have implemented similar application to estimate effects
- Statistics – Gather as much useful information as possible prior to and after implementation. This data will come in handy during the above tasks.
- Reports – Take the information above and publish it. Let the users and administration know of the success or problems as they occur.



Considerations - Security

- Passwords – Design system around security.
DO NOT pass USER-ID and PASSWORD in each web request. Consider temporary cookie to store user-id/password
- Time-outs – Use time out facilities in WEB design to limit exposure.
- Errors – Design into the system a real time error reporting system. This will limit down time and alert operations to potential problems (hackers)
- Test test test and more tests – Recruit the help of savvy internet/network people to break in to system before opening to the world



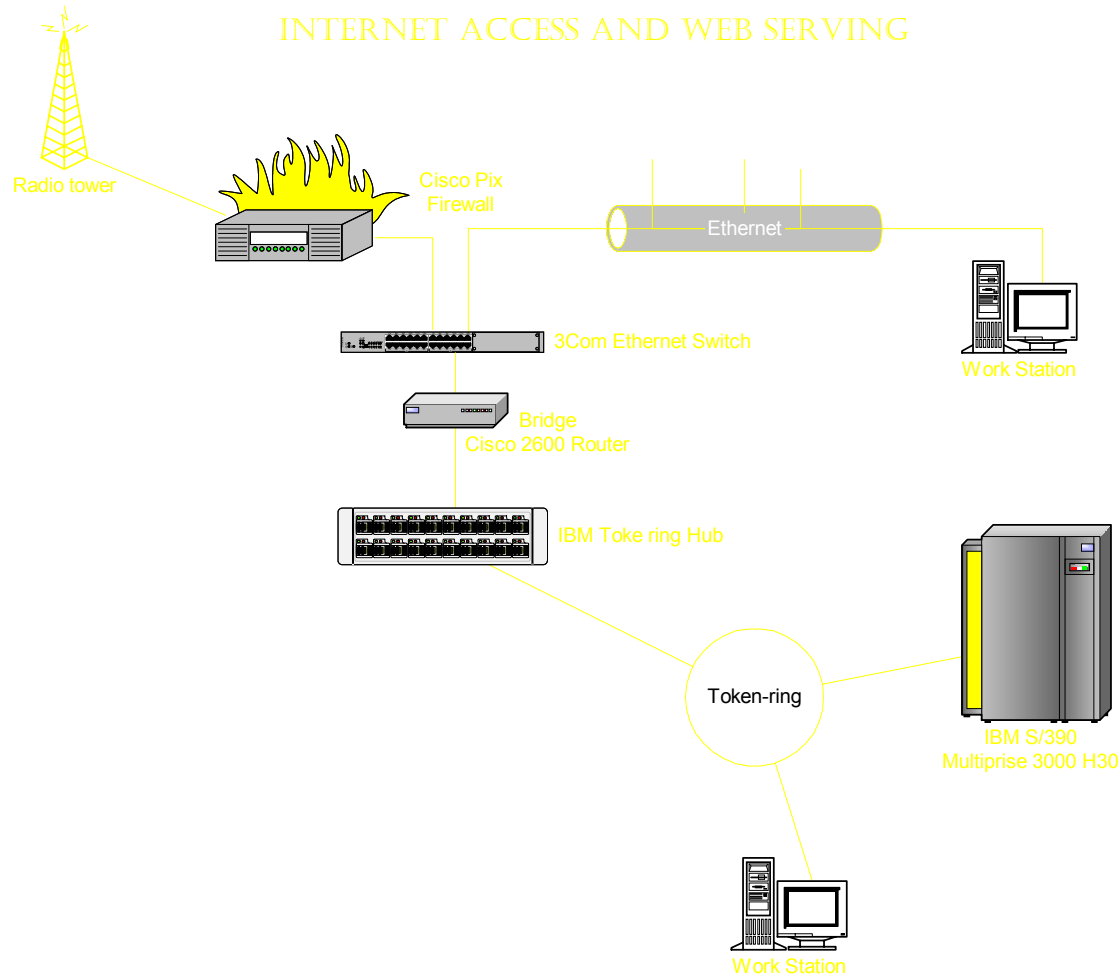
Considerations - Growth

Never underestimate the growth potential or the popularity that an e-business application approach will have. plan carefully and then watch it like a hawk as when you least expect it will take over and make your life hell.

However on the same note if planned well this could be the most exciting thing to happen to mainframe processing since its inception. So don't hesitate - jump in the water is just right!

WAVV 2002

INTERNET ACCESS AND WEB SERVING



e-Business User Experience



Terry Hall

A.Y. McDonald Mfg. Co.



A.Y. McDonald Mfg. Co.

Dubuque, Iowa

Established in 1856, A.Y. McDonald is a leading manufacturer of waterworks brass, plumbing valves, pumps and water systems, high pressure gas valves and meter bars.

- 450 employees
- 3 manufacturing plants



System Configuration

- VSE/ESA 2.6
- CICS TS For VSE/ESA
- TCP/IP-Tools from Barnard Software, Inc.

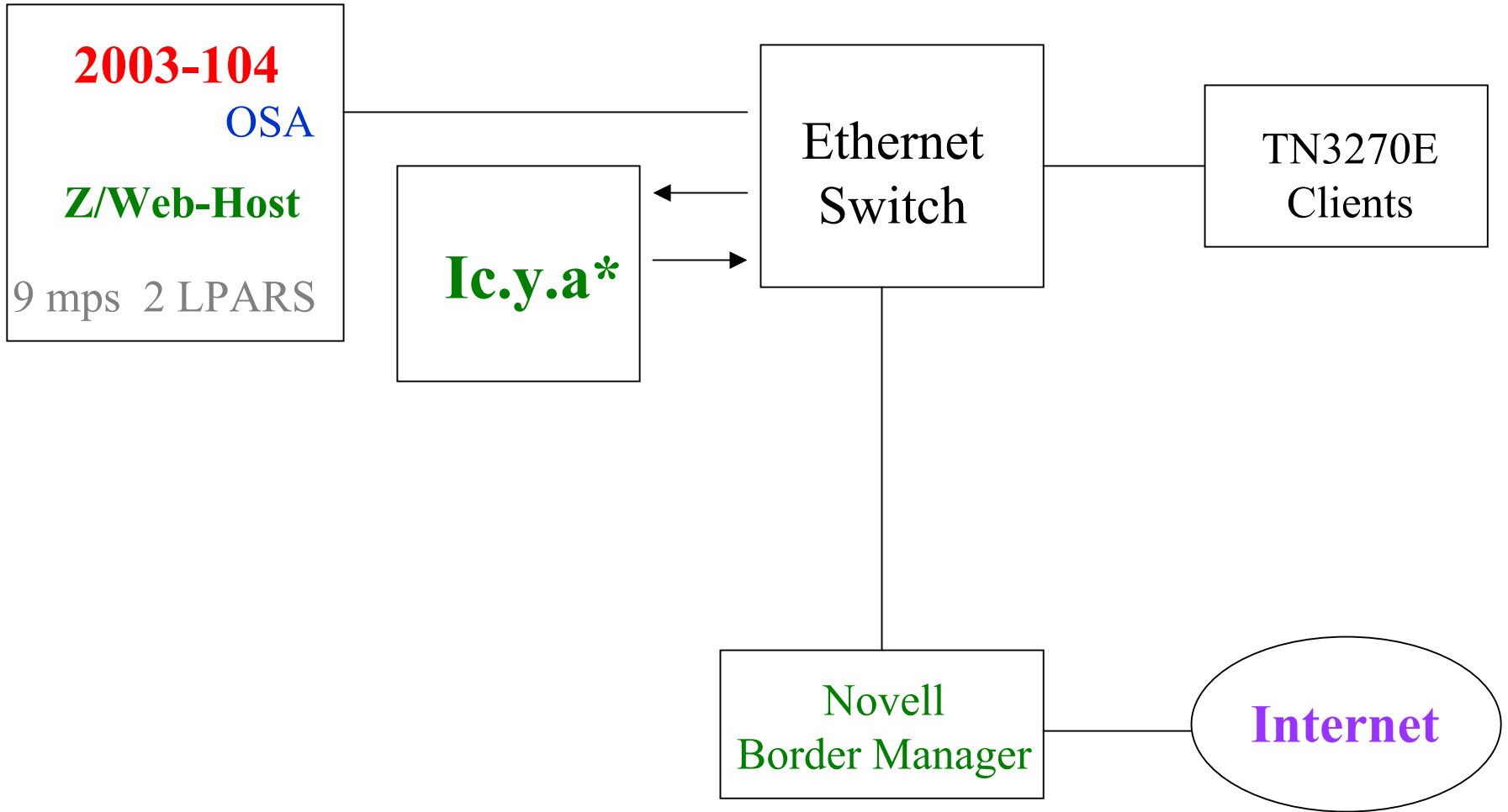


- z/Web-Host for VSE from IntelliWare Systems, Inc.



Access Applications from Anywhere™

System Configuration



* IntelliWare control your access

Why web access to mainframe 3270 applications?

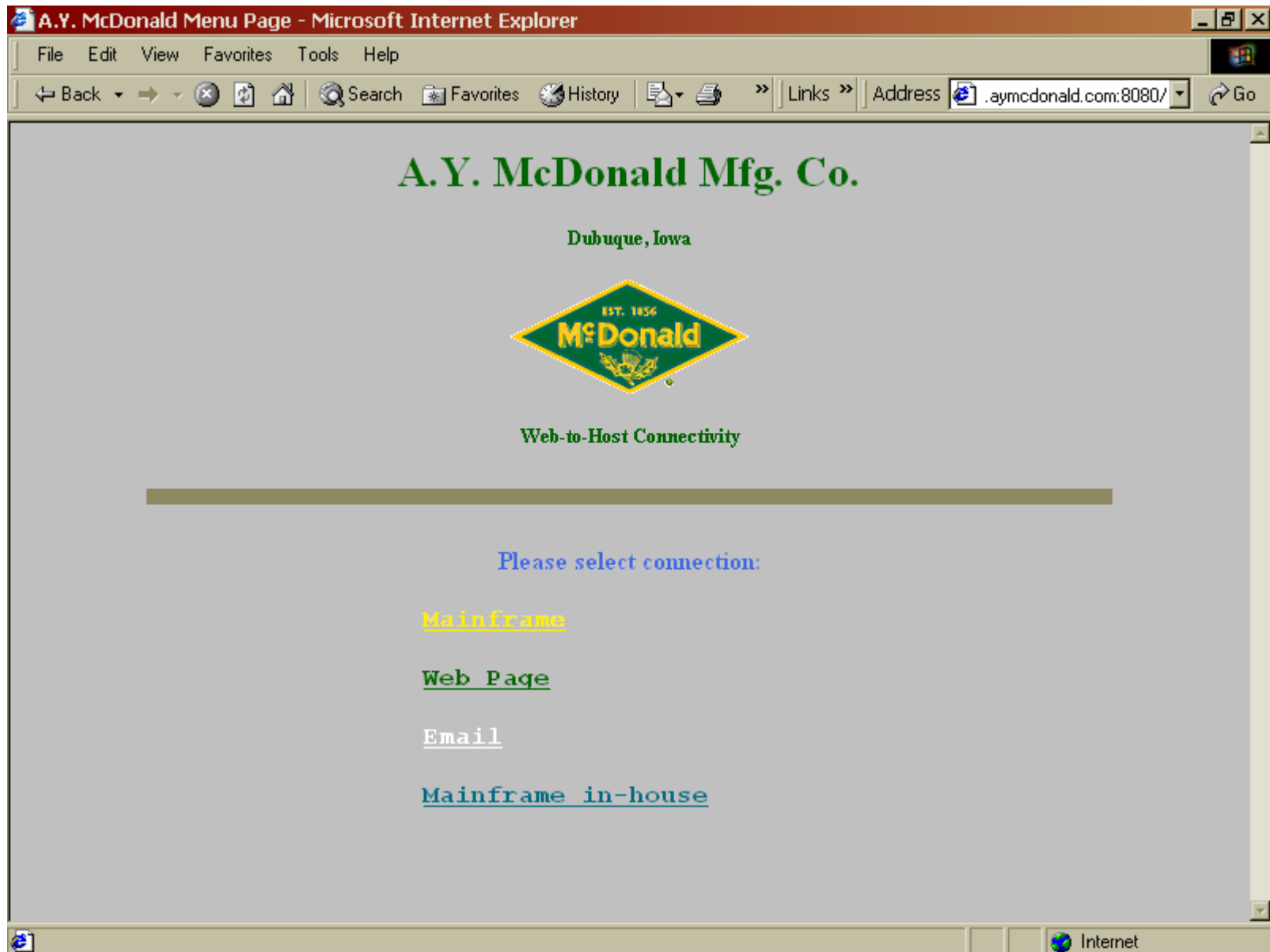
- **90% of company data resides on the mainframe**
- **Allow employees access to the data from anywhere**
- **In the future allow customers limited access**

Why z/Web-Host for VSE from IntelliWare?

- **Fast and easy to install**
- **Three tier not required**
- **No application program changes necessary**
- **Customize the appearance of 3270 screens**
- **Runs in a VSE partition**



Menu Selection page




CICS selection page

A.Y. McDonald CICS Selection - Microsoft Internet Explorer

File Edit View Favorites Tools Help

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A.Y. McDonald Mfg. Co.



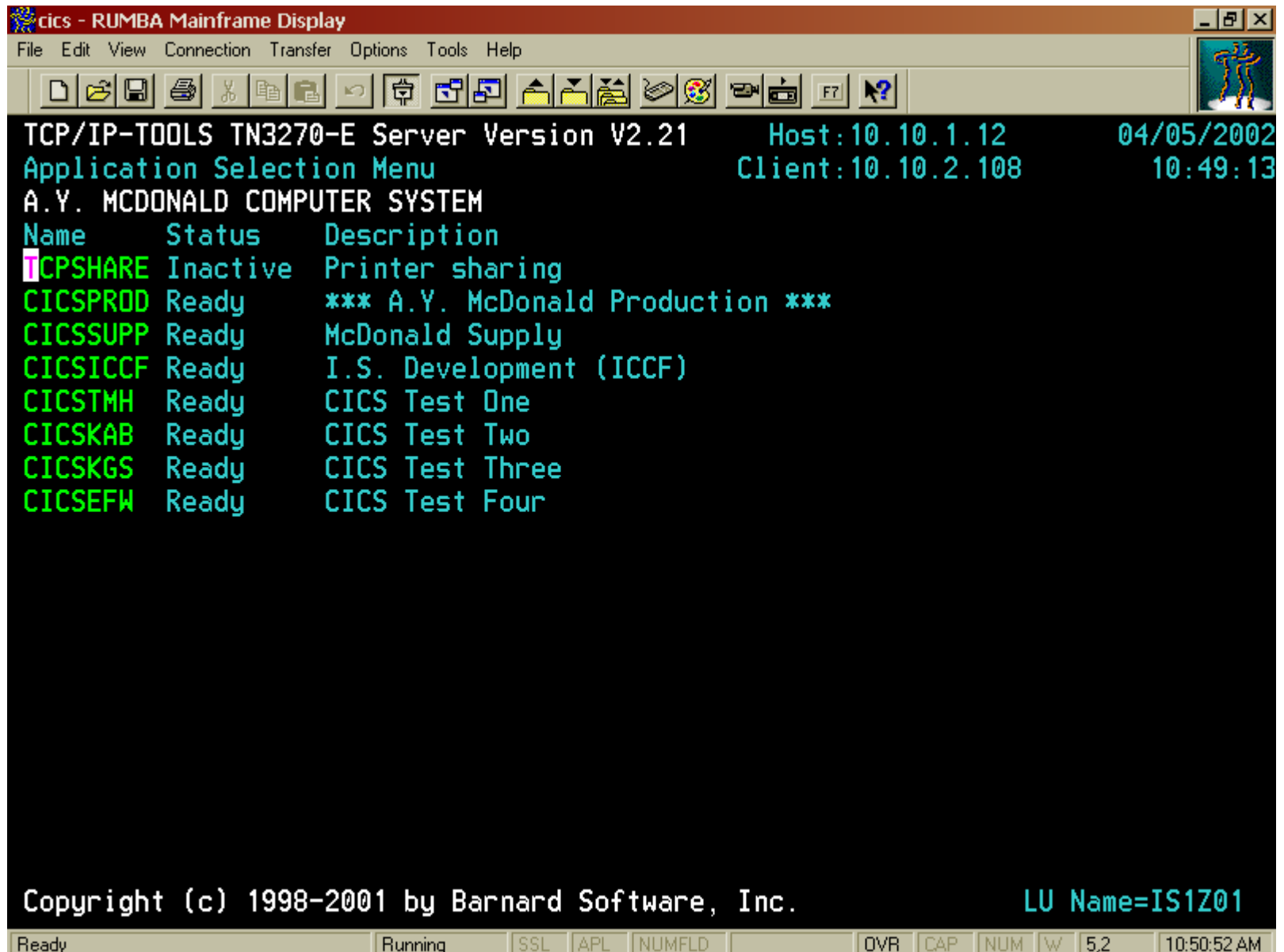
Mainframe connection

Please select CICS environment:

| | | |
|---------------------------------------|-------|----------------------------------|
| <input type="text" value="CICSPROD"/> | Ready | *** A.Y. McDonald Production *** |
| <input type="text" value="CICSSUPP"/> | Ready | McDonald Supply |
| <input type="text" value="CICSICCF"/> | Ready | I.S. Development (ICCF) |

Done Internet

TN3270e Selection



The screenshot shows a terminal window titled "cics - RUMBA Mainframe Display". The window has a menu bar with "File", "Edit", "View", "Connection", "Transfer", "Options", "Tools", and "Help". Below the menu bar is a toolbar with various icons for file operations and system functions. The main display area shows the following text:

```
TCP/IP-TOOLS TN3270-E Server Version V2.21      Host:10.10.1.12      04/05/2002
Application Selection Menu                      Client:10.10.2.108  10:49:13
A.Y. MCDONALD COMPUTER SYSTEM
Name      Status   Description
ICPSHARE  Inactive  Printer sharing
CICSPROD  Ready    *** A.Y. McDonald Production ***
CICSSUPP  Ready    McDonald Supply
CICSIICCF Ready    I.S. Development (ICCF)
CICSTMH   Ready    CICS Test One
CICSKAB   Ready    CICS Test Two
CICSKGS   Ready    CICS Test Three
CICSEFW   Ready    CICS Test Four
```

At the bottom of the terminal window, there is a status bar with the following information:

Copyright (c) 1998-2001 by Barnard Software, Inc. LU Name=IS1Z01


Ready | Running | SSL | APL | NUMFLD | OVR | CAP | NUM | W | 5,2 | 10:50:52 AM

A.Y. McDonald CICS sign on - Microsoft Internet Explorer

File Edit View Favorites Tools Help

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A.Y. McDonald Mfg. Co.



Mainframe CICS production environment

Please enter userid and password

Userid:.....

Password:...

Message:

Enter Clear Refresh Disconnect

Done Internet

TN3270e CSSN

Prod - RUMBA Mainframe Display

File Edit View Connection Transfer Options Tools Help

A.Y. McDonald Mfg. Co. CSSN
IS1D

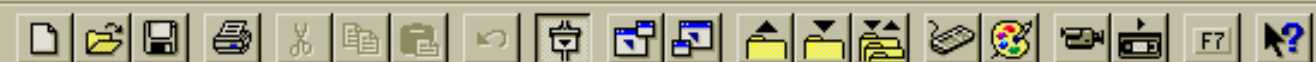
EST. 1856

```
MM      MM      cccc  DDDDD                      11      dd
MMM     MMM     ccccc DDDDDDD                      11      dd
MMMM   MMMM    cc     DD  DD    ooooo  nn          aa    11      dd
MMMMMMMMMM  cc     DD  DD    ooooooo  nnnnnn         aa    11      dd
MM  MM  MM  ccccc DD  DD    oo  oo  nn  nn  aaaaaa  11  dddddd
MM  MM  MM  _cccc DD  DD    oo  oo  nn  nn  aa  aa  11  dd  dd
MM      MM      DDDDDDD  ooooooo  nn  nn  aa  aa  11  dd  dd
MM      MM      DDDDD    ooooo  nn  nn  aaaaaa  11  dddddd
```

userid:.....
password:...

Message :

Ready Running APL NUMFLD | OVR CAP NUM W 19,39 1:39:02 PM



```

===>
<<...+...1...+...2...+...3...+...4...+...5...+... MEM=AYW00001 ...+..F>
  ACCESS S=AYMOEM.ZWEBAYM /===/*
CATALOG AYW00001.WEBSCR REPLACE=YES *===*
* *===*
::SCREEN:: SCREEN DEFINITION FOR MCDONALD CSSN *===*
* *===*
Screen_Name CSSN *===*
SCREEN_DATA ROW 1 COLUMN 30 STRING A *===*
Screen_Data ROW 1 COLUMN 77 STRING CSSN *===*
HTML_TEMPLATE AYT00001.TEMPLATE *===*
* *===*
Key_Disable PA1 PA2 PA3 *===*
Key_Disable PF1 PF2 PF3 PF4 PF5 PF6 *===*
KEY_DISABLE PF7 PF8 PF9 PF10 PF11 PF12 *===*
Key_Disable PF13 PF14 PF15 PF16 PF17 PF18 *===*
Key_Disable PF19 PF20 PF21 PF22 PF23 PF24 *===*
* *===*
* *===*
CUT_REGION 1 17 *===*
MAP_COLOR YELLOW 871F78 *===*
MAP_COLOR WHITE 000000 *===*
* *===*
/+ *===*

```



```

===>
*MSG=PRESS PF1 TO SHOW PF KEY ASSIGNMENT ...+....5....+.. MEM=AYT00001 ...+..F>
* $$ JOB JNM=AYT00001,DISP=D,CLASS=0 /===/*
// JOB AYT00001 *===*
// EXEC LIBR,SIZE=256K *===*
// ACCESS S=AYMOEM.ZWEBAYM *===*
CATALOG AYT00001.TEMPLATE REPLACE=YES *===*
<HTML> *===*
<! z/Web-Host Sample HTML Template *===*
 * IntelliWare Systems Inc. *===*
 * /> *===*
<HEAD><TITLE>A.Y. McDonald CICS sign on</TITLE> *===*
<STYLE>INPUT {FONT-FAMILY:COURIER}</STYLE> *===*
<STYLE>H3 {COLOR:DARKGREEN; FONT-FAMILY:SANS-SERIF}</STYLE> *===*
</HEAD> *===*
<BODY BGCOLOR="WHITE" TEXT="BRASS" ONLOAD="INITCURSOR()"> *===*
<CENTER><IMG SRC="MCDONALD.GIF"> *===*
<CENTER><IMG SRC="AYLOGO.GIF"> *===*
<H3><CENTER>Mainframe CICS production environment<CENTER></H3/> *===*
<H2><CENTER>Please enter userid and password</H2/> *===*
<!-- Z/WEB-HOST SCREEN --> <!-- The 3270 screen will be put here --> *===*
</FONT></BODY></HTML> *===*
/+ *===*

```

z/Web Screen

A.Y. McDonald z/Web Host - Microsoft Internet Explorer

File Edit View Favorites Tools Help

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Trns Year Month Day FRIDAY APRIL 5 2002 95 270 10:53:22 AM GDAT
10:53:22

2002 04

07 DAYLIGHT SAVINGS

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | | | | |

PF1 Help
PF3 End
PF6 Comp
PF7 Bwd
PF8 Fwd

| MARCH 2002 | | | | | | |
|------------|----|----|----|----|----|----|
| S | M | T | W | T | F | S |
| | | | | 1 | 2 | |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | | | | | | |

| MAY 2002 | | | | | | |
|----------|----|----|----|----|----|----|
| S | M | T | W | T | F | S |
| | | 1 | 2 | 3 | 4 | |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 | |

Enter Help Swap SwapBack Clear Refresh Disconnect

Done Internet

A.Y. McDonald Sign off - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites History Links Address .com:8080/WH00CGI1 Go

A.Y. McDonald Mfg. Co.

Goodbye. Please disconnect.



Powered by VSE/ESA!

Message: SNTE002- 10:54:09 SIGN-OFF IS COMPLETE

Enter Clear Refresh Disconnect

Done Internet

Has it been successful?

Yes!

The employees of A.Y. McDonald highly praise z/Web-Host

