

Web Application Deployment using SPLF

Presenter: Stephen W. Meeley

SYNERGY 2019
CRUISING TO NEW HORIZONS

What should I do?

- “The problem with you boys is that you don’t know the difference between what you **can** do and what you **should** do...”
- This presentation will carry on that tradition by focusing completely on what you **can** do, what you **should** is up to you...

OK, I lied; you **should** do these things...

- Not now, but sometime soon, take the [Security the Basics](#) course in the DataFlex Learning Center
- Attend “Are you thinking about security?”
 - Joao – DALA
 - Thursday – 12:00
- **Learn** DataFlex & SQL
- **Be** DataFlex & SQL
- **Deploy** DataFlex & SQL...

How Licenses Work Together

- Don't conflate installations and licenses
 - Windows Client Installation – runtime and utilities
 - WebApp Server Installation – Client plus server components and examples
 - Studio Installation – Server (includes Client) plus Studio, compiler, package libraries and more examples
- Use the installation that gives you what you need based on your scenario
- Register the license(s) that you need based on your scenario
 - Licenses “stack”; Studio (1), Server (1), Windows Clients (n)
 - If you mix standard and connectivity-enabled licenses, connectivity will be turned off for the entire stack
 - “Active” license will be what is returned when querying serial number and reg name

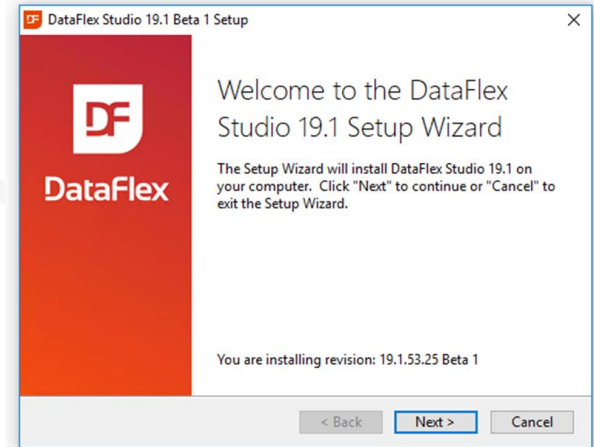
WebApp Basics

- There are really two complete systems that work together...
 - Web application
 - Requires IIS and associated stuff (technical term)
 - Only the AppHTML folder (includes the JavaScript Engine)
 - DataFlex processes
 - Require the runtime and access to the data
 - Everything but the AppHTML folder

New Installer

- Provides a crisp, modern look across all monitor resolutions
- Ready for 64-bit
- Optional automatic IIS configuration (Studio and Server)
- Optional installation of example applications
- [Command line interface](#) for controlling an embedded installation

- MSI Based
- Created using Advanced Installer



Server Installation Examples

- "DataFlex 2019 Server 19.1.55.124" MINIMAL=1
DFLANGUAGE=DE DESTINATION="C:\DataFlex 19.1"
NO_EXAMPLES=1 NETWORK=1
- "DataFlex 2019 Server 19.1.55.124" /exenoui /qn
DESTINATION="C:\DataFlex 19.1" NO_EXAMPLES=1
SKIP_IIS=1 NETWORK=1

Deployment Scenarios

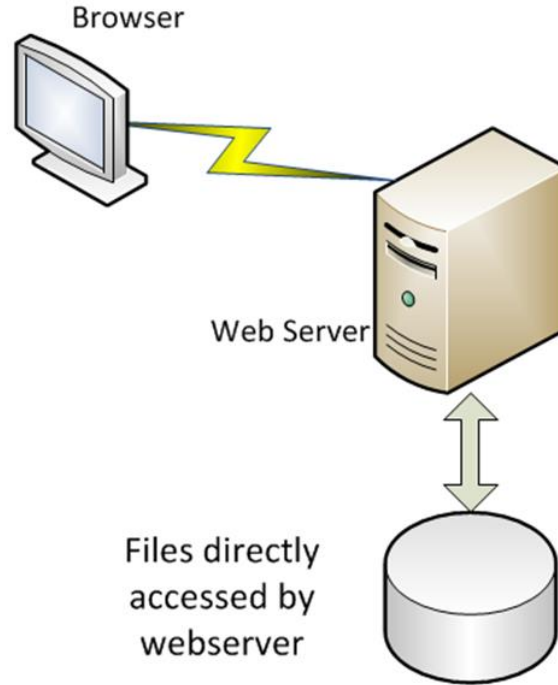
- Local
 - Single machine
- Network Server
 - Web server only
 - Web and file server (mixed Web and Windows application)
- SPLF
 - Web server - public accessible
 - Application server(s) – only accessible by Web server
 - Database server / common data
- Cloud
 - Any of the above

SPLF – What and Why

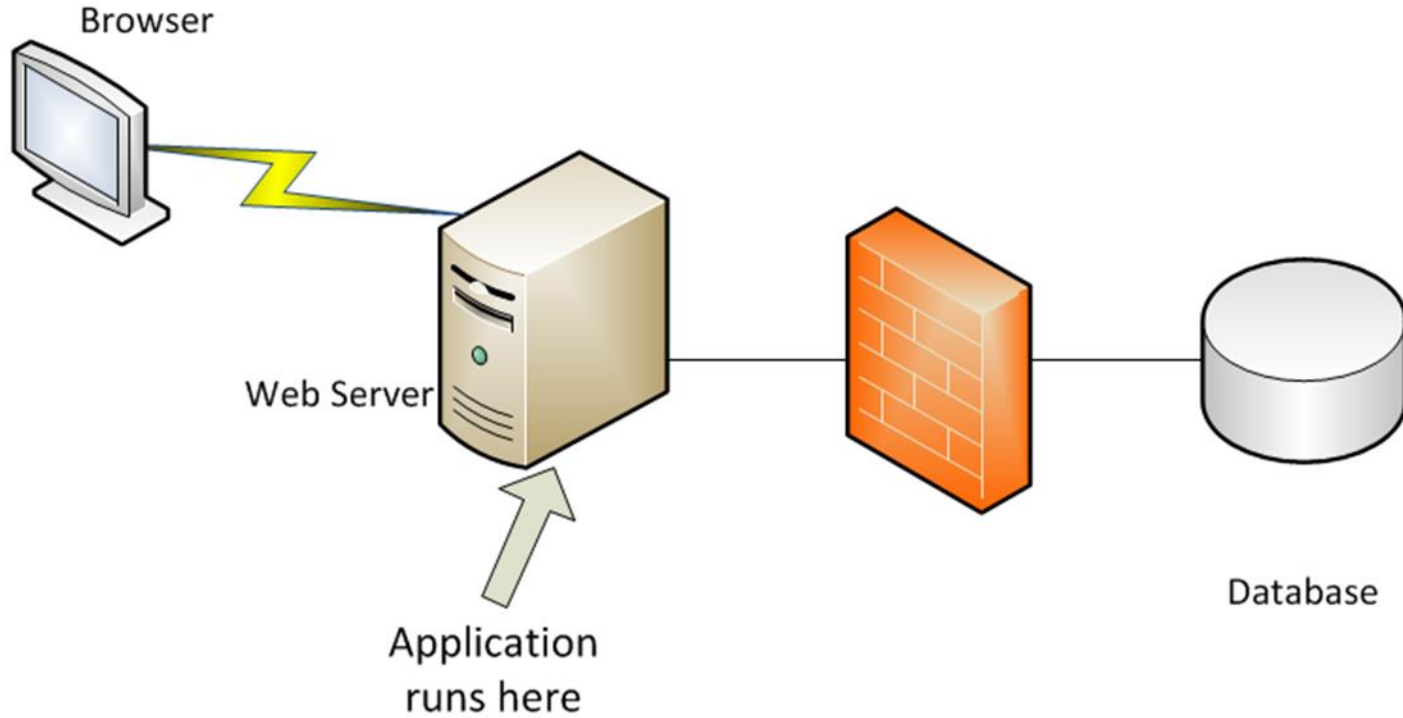
- S(ecurity)
- P(erformance)
- L(oad balancing)
- F(ail over)



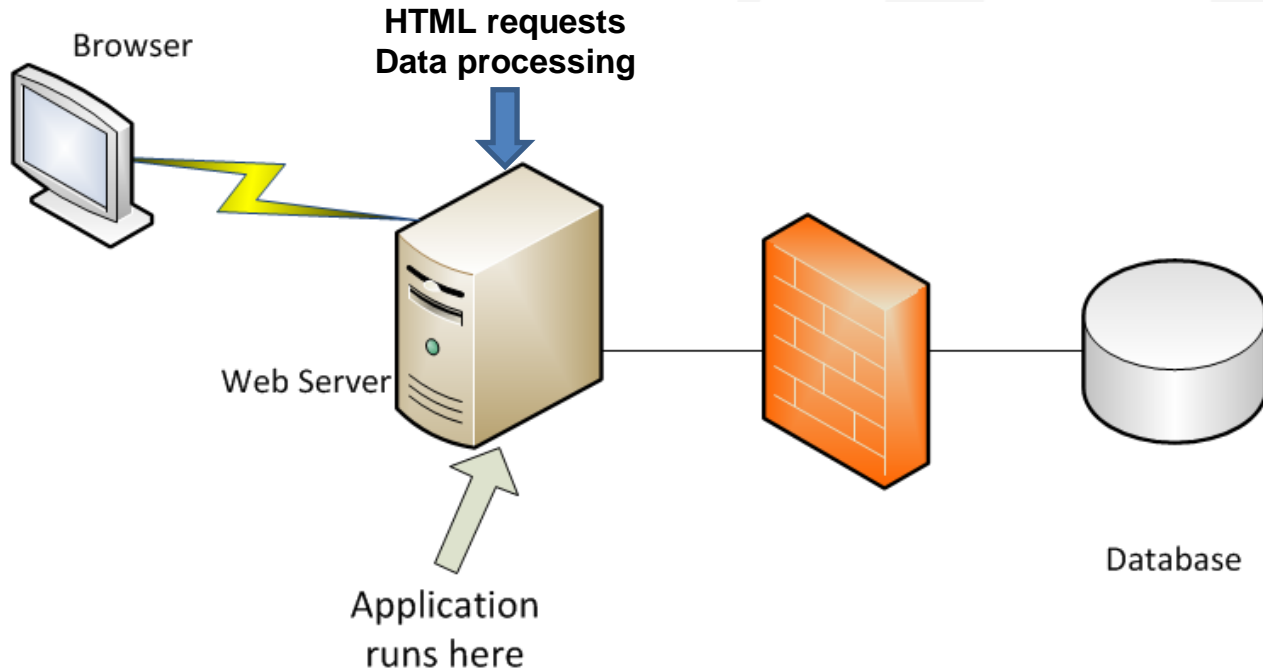
Basic Website



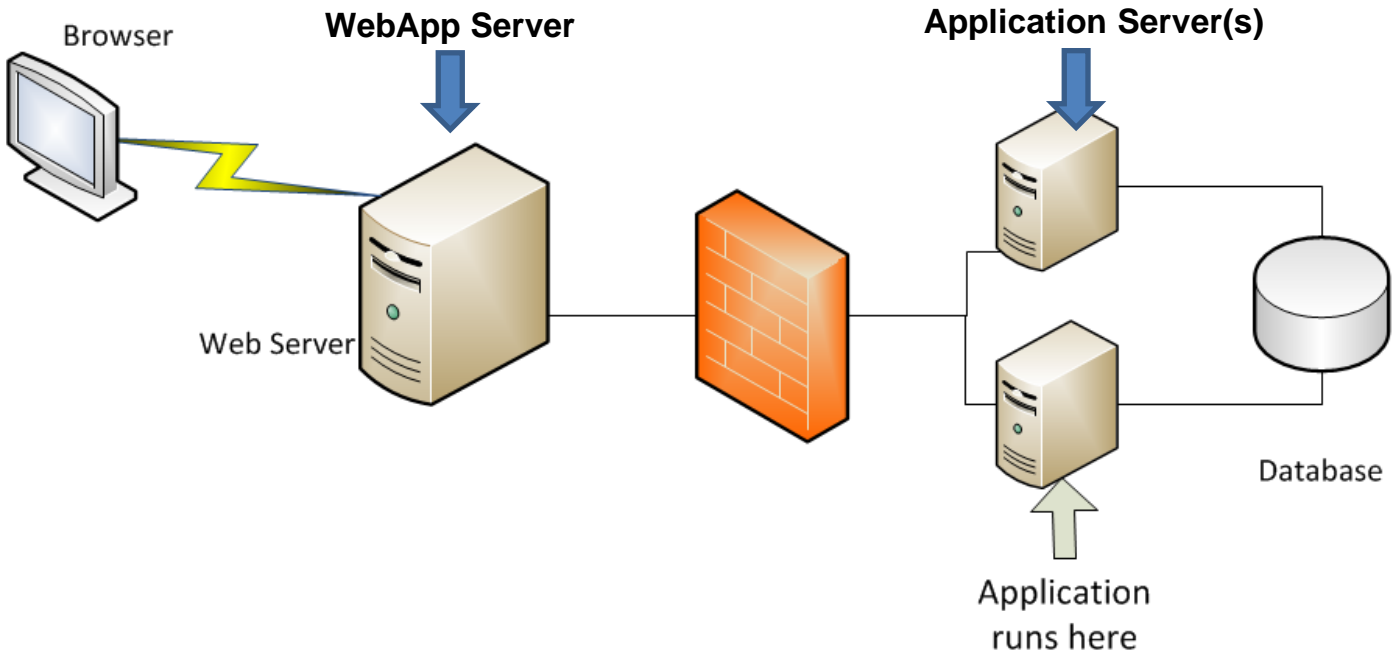
Application Website



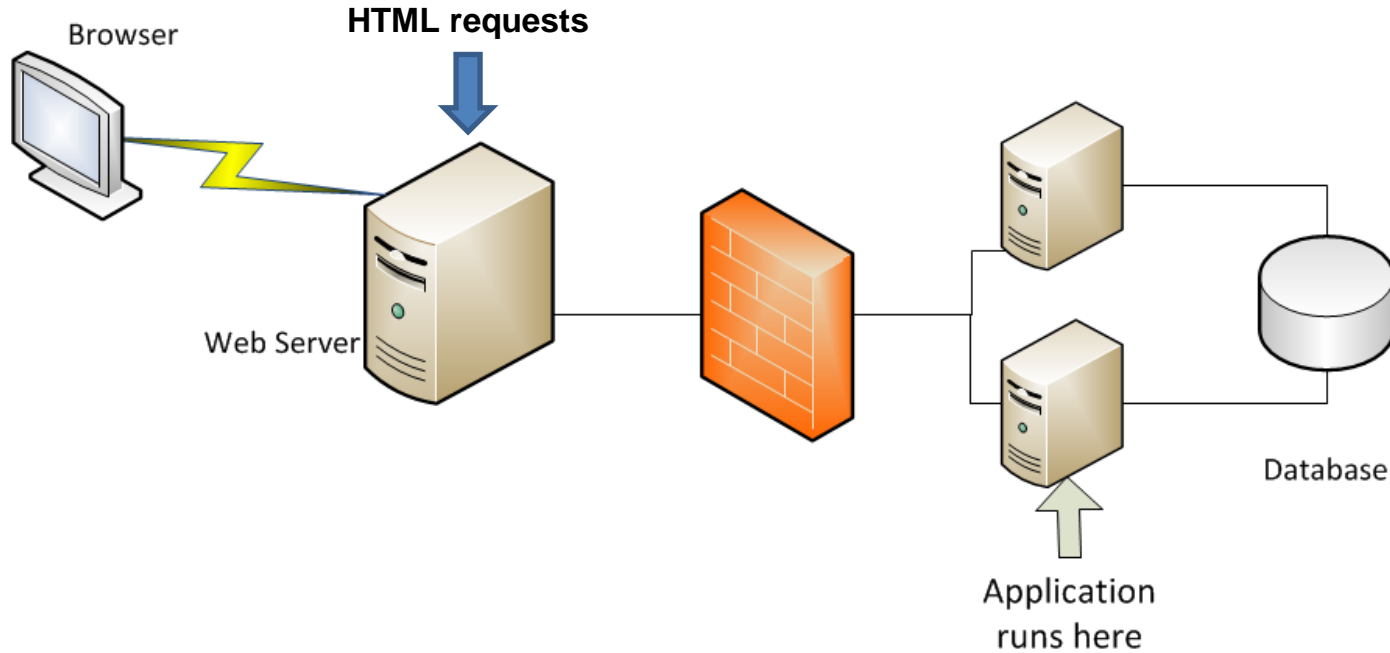
Application Website



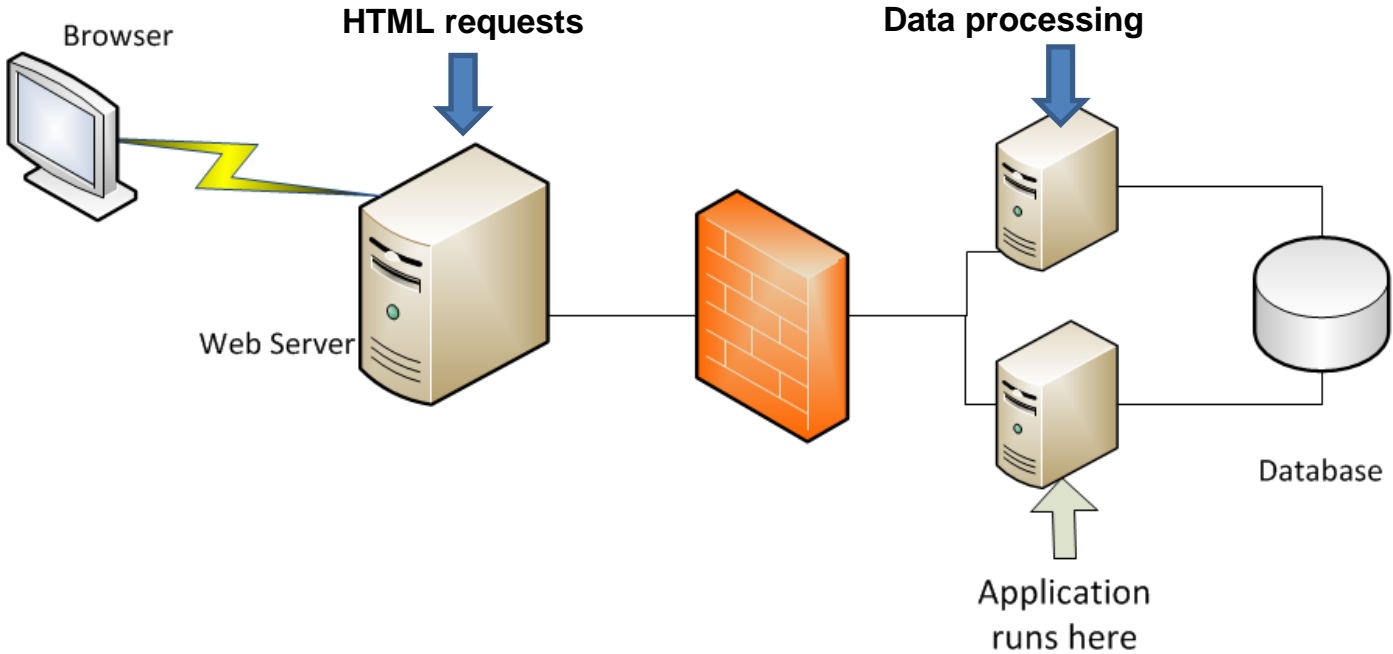
SPLF website



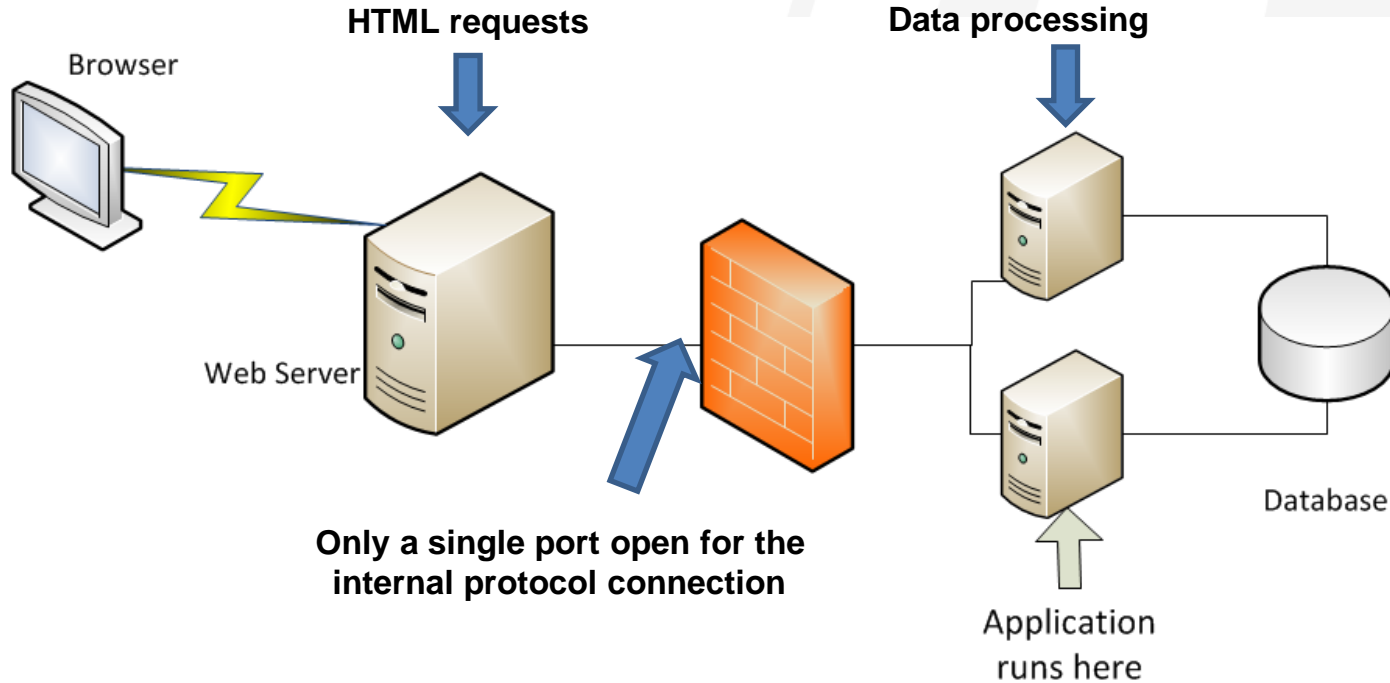
SPLF website



SPLF website



SPLF website



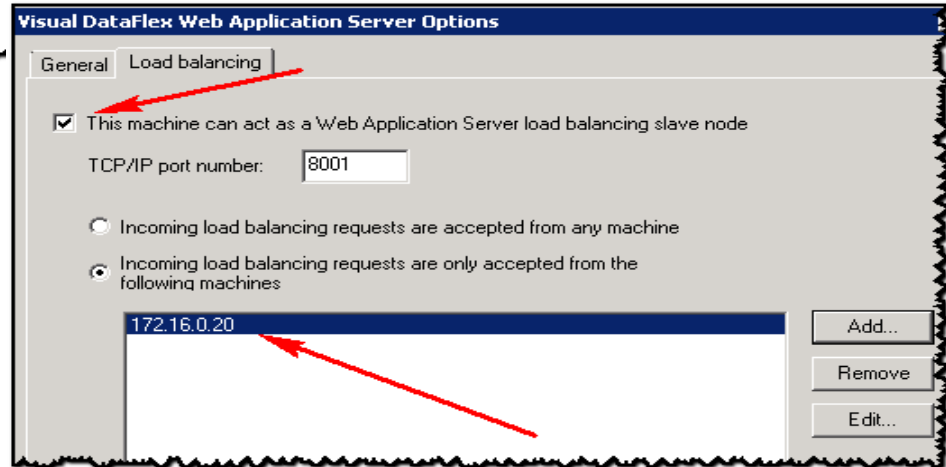
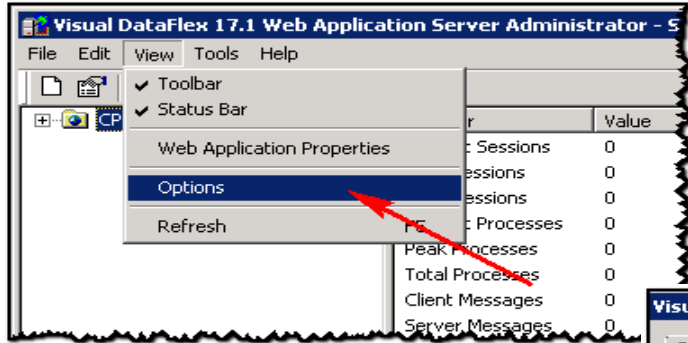
SPLF Setup Fundamentals

- Webservice
 - AppHTML Folder
 - Register WebApp
 - Webshare AppHTML
- Application server(s)
 - Everything else
- Licenses
 - SPLF license on the webservice
 - Separate licenses on each application server
 - The webservice can't connect to two application servers running the same license

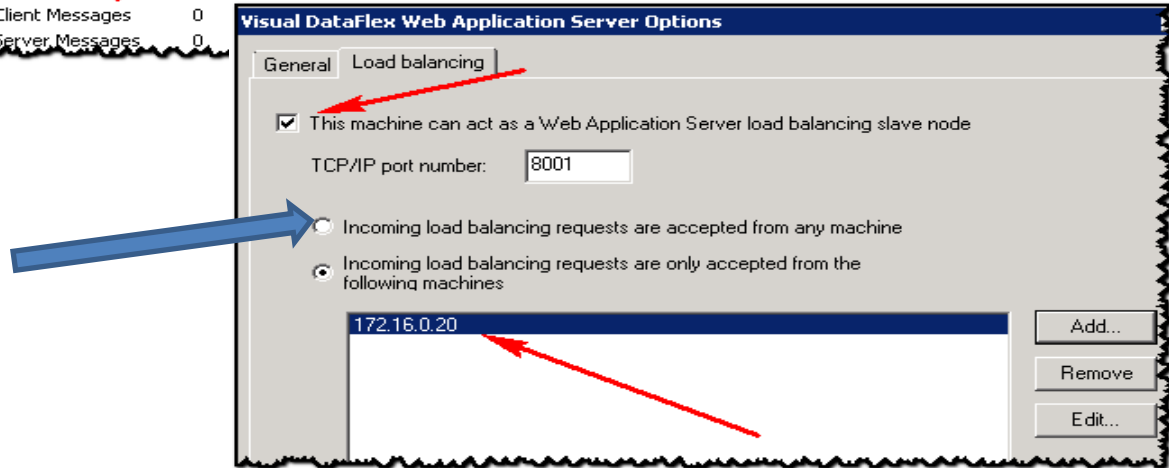
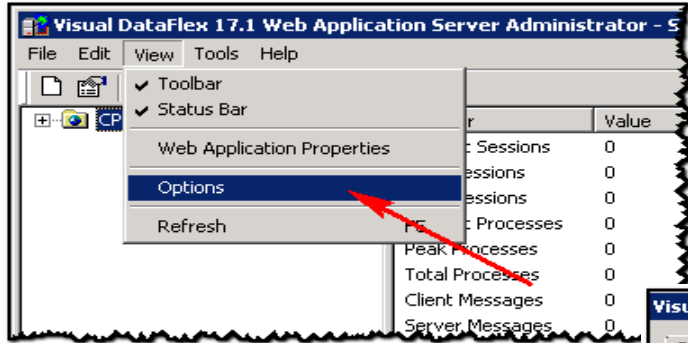
SPLF Setup Fundamentals

- Webserver
 - Set any application to be load balanced
 - Set the IP addresses of the application server(s)
 - Can be IPv4 or IPv6 (new to 19.1)
 - Set the port for communication
 - Set the process pool
- Application server(s)
 - Set the application to be controlled by a load balancing server
 - Can limit to known IP address(s)
 - Set the port for communication
 - No process pool settings (can't even "see" them because they are completely controlled by the master)

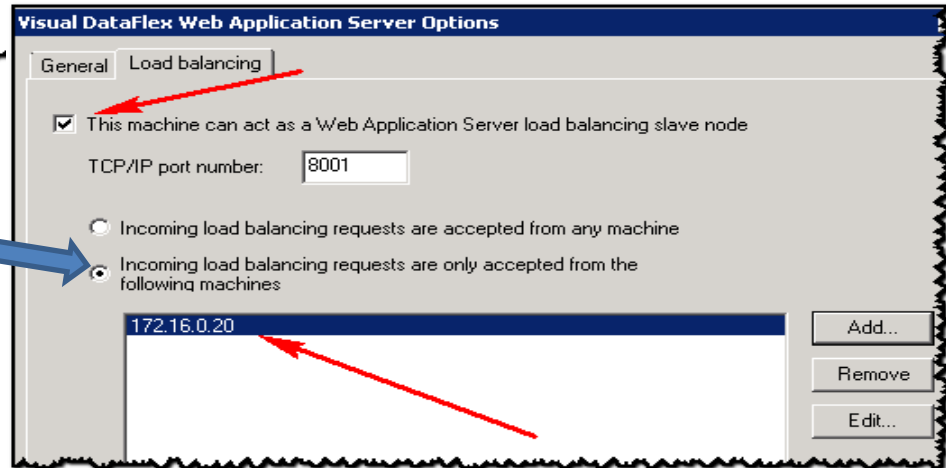
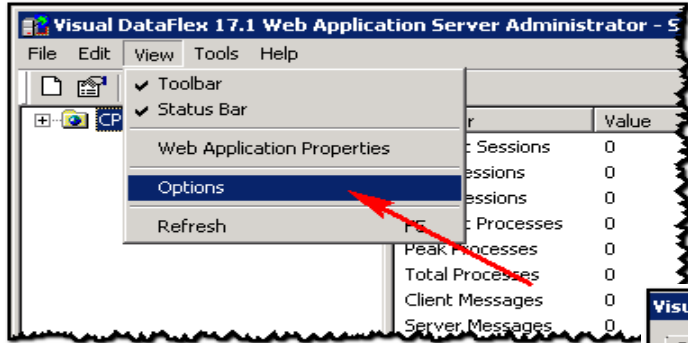
Application server setup



Application server setup



Application server setup



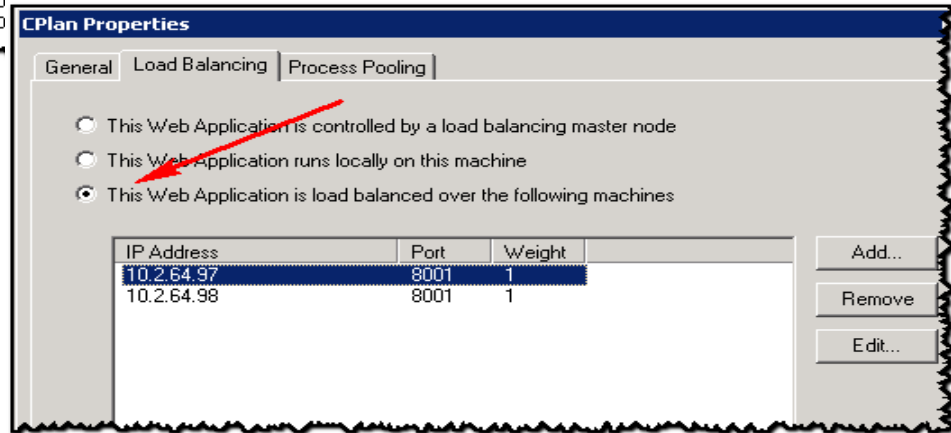
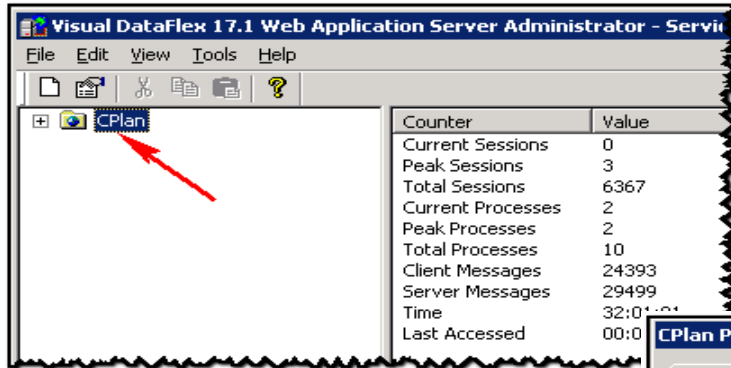
Application server setup

The screenshot displays the Visual DataFlex 17.1 Web Application Server Administrator interface. The main window shows a tree view on the left with 'CPlan' selected, indicated by a red arrow. The right pane displays a table of performance counters for 'CPlan'.

| Counter | Value |
|-------------------|-----------|
| Current Sessions | 0 |
| Peak Sessions | 0 |
| Total Sessions | 0 |
| Current Processes | 0 |
| Peak Processes | 0 |
| Total Processes | 0 |
| Client Messages | 0 |
| Server Messages | 0 |
| Time | 933:44:38 |
| Last Accessed | 933:44:38 |

Below the counter table, a red arrow points to a partially visible configuration window. This window shows a section for 'Load balancing master node' and 'machine'. It includes a table with a 'Weight' column and three buttons: 'Add...', 'Remove', and 'Edit...'.

Webserver application setup



Demo





Are there any questions?

Thank you!