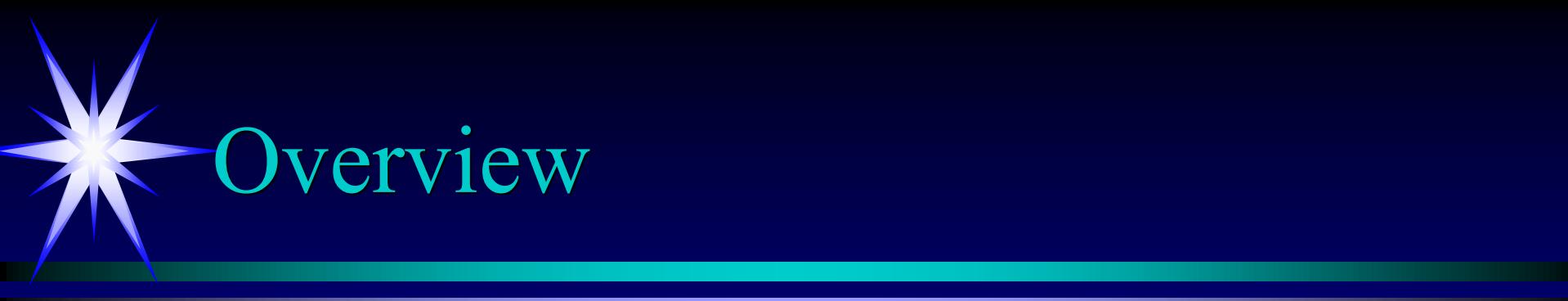




Application Server

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Sunbelt Computer Systems



Overview

- Plbserve Changes
- Plbclient Changes
- Client Cache
- CACHELIST/CACHELISTEND
- Connection Recovery
- Unix Client
- Miscellaneous



PLBSERVE

- PLBCS_KEYFILE={keyfile}
 - PLBCLIENT Access Control
 - Identical to SUNFM
 - PLBCS_LOGON={logonkey}

- PLBCS_IPFILTER={ipfilter}
 - PLBCLIENT Access Control
 - Identical to SUNFM
 - IP Filtering



- KEEPALIVE Support
 - Added to Unix Server
 - Client Premature Termination
- Server Command Line Option ‘-r’
 - Reset Authorization Number
 - Real Time
 - Five Reset Errors
 - Reload Required



- PRINT SPOOLING CONTROL
 - Default Operation at Client
- PLBCS_APSPPOOL={0|1|2}
- GETMODE/SETMODE
 - *ASPOOL={0|1|2}
- ‘!’ Supported



- PLBCS_ASPOOL=0
 - PRINT at Client
 - SPLOOPEN at Client

- PLBCS_ASPOOL=1
 - PRINT at Server
 - SPLOOPEN at Server
 - Except LPT(1-4)
 - At Client



- PLBCS_ASPOOL=2

- PRINT at Server
- SPLOPEN at Server



- PLBCS_LOGMAX=nnnnn
 - Maximum Records Log File
 - Default Unlimited
 - Zero Value Unlimited
 - Overwrite at Beginning



- LOG FILE FORMAT
 - Fixed Length 79 Characters
 - Records Wrap



- FORMAT of Log Record
- YYYY-MM-DD HH:MM:SS L DATA
 - YYYY-MM-DD - Current date
 - HH:MM:SS - Current time
 - NNNN - Admin slot identification
 - L - Application Server log level
 - DATA - Log data



□ CODEPTR_NNNN.IMG

- NNNN Thread ID
- Internal Debugging
- Contact Sunbelt



- 256 Instruction Check
- Connection Lost
 - Terminate Program Thread
- PLBCS_NOCLIENT={ON|OFF}
 - ‘ON’ Program Continue
 - Terminate on Client Access



- Internal Debug ‘-d3’
 - PLBWIN_NNNN.LOG
 - PLBWIN1_NNNN.LOG
 - PLBWIN2_NNNN.LOG
- ‘NNNN’
 - PROCESS/THREAD ID



- PLBCS_RECVTIMEOUT={seconds}
 - Server Receive Timeout
 - Default Receive Timeout 130 seconds
 - Zero Seconds
 - Wait Until Connection Lost



- Server Log For Errors
- Client User Name
- Client Computer Name



- PLBCS_LOCALIP
 - Used for Commands
 - ‘-f’
 - ‘-r’
 - ‘-t’
 - PLBCS_HOSTNAME=0.0.0.0



- CLOCK VERSION
 - Include PLBCLIENT Version
- GETMODE *GUI
 - No GUI for PLBCLIUNIX



PLBCLIENT

- New Command Line Options
 - ‘/ver’ or ‘-ver’
 - Version
 - License Information
 - ‘/deb’ or ‘-deb’
 - Debug Log File
 - Executable Name
 - ‘.log’ Extension



PLBCLIENT

- PLBCS_RECVTIMEOUT={seconds}
 - Client Receive Timeout
 - 300 seconds Default
 - Communications Problem Dialog
 - Continue
 - Retry
 - Zero Seconds Timeout Disabled



CLIENT CACHE

- Client Caching Implemented
 - CACHE Overview
 - Languages Changes
 - Plbclient Changes
 - Plbserve Configuration Parameters



CACHE Overview

- Client Side Caching
 - PLF Forms
 - Icons
 - Pictures
 - Sound Files
 - Copyfile



CACHE Overview

- Disk Cache
 - Unlimited
- In Memory Cache
 - 100 Elements Default
 - LRU (Least Recently Used)



CACHE Overview

- Delete Files Manually
 - No Ill Effect
- PLF Form Resources
 - Also Cached



LANGUAGE CHANGES

- Filename Specifications
- Server Keywords
- PLF Forms
- CACHELIST/CACHELISTEND



FILENAME SPECIFICATIONS

- Leading ‘?’ or ‘*’
 - Icons
 - Pictures
 - Sound Files
 - Source of Copyfile



FILENAME SPECIFICATIONS

- Leading ‘?’

- 1st From Disk Cache
- 2nd From Server
 - Place into Cache

- Leading ‘*’

- 1st From In-memory Cache
- 2nd From Server
 - Place into Cache



- PLF Marked With G UID
- 8.7B Designer or later
- PLF Cached Once & Use Many Times
- Designer Only ‘ServerCanCache’ Property



PLF FORMS

- GUID Changes When PLF Written
- No GUID Then PLC Timestamp Used
 - New PLF Cache after each Compile
- Old Cached Items Removed
 - See Client PLBCS_CACHEAGE



PLF FORMS

- Optimal Caching
 - PLF Written with 8.7B or later
 - SETGUID Utility

- Non-Optimal Caching
 - Older PLC Programs
 - 8.4A or later



SERVER CACHE KEYWORDS

- Set Default Caching From Server

- PLBSERVE.INI



SERVER CACHE KEYWORDS

- PLBCS_CACHEICONS={NONE/MEM/DISK}
 - PLBCS_CACHEPICTS={NONE/MEM/DISK}
 - PLBCS_CACHESNDS={NONE/MEM/DISK}
-
- NONE - no caching (default)
 - MEM - cache in-memory only
 - DISK - cache in-memory and on disk



PLBCLIENT CHANGES

- Command Line Option
 - ‘/clear’ or ‘-clear’
 - Delete All Current Cached Items
- Cache Aging
 - Default Time 7 Days
 - PLBCS_CACHEAGE



PLBCLIENT.INI KEYWORDS

- PLBCS_CACHE={ON/OFF}
 - Default ON
 - Use CACHE

- PLBCS_CACHEDIR={Directory}
 - Directory To Store Cache
 - Default PLBCSTEMP Directory
 - Same Directory as PLBCLIENT



PLBCLIENT.INI KEYWORDS

- PLBCS_CACHEAGE={age}
 - Default 7 Days
 - Set Number of Days
 - Delete Old Cache Items

- PLBCS_IMCOUNT={count}
 - In Memory Item Count
 - Default 100 Items



PLBCLIENT.INI KEYWORDS

- PLBCS_IMSIZE={kb}
 - In Memory Maximum Memory Size
 - Default Unlimited Size
 - Zero For Default



CACHELIST/CACHELISTEND

- Group of CREATE Statements
- NOP Except for PLBSERVE
- Group ID Assigned
 - RSA Data Security, Inc.
 - MD5 Message-Digest Algorithm
 - Unique Ids Provided



CACHELIST/CACHELISTEND

- Create Group Is CACHED
- Identical CACHELIST Groups
- Different Programs
- Same CACHELIST Item Used



CACHELIST/CACHELISTEND

- PLB Statements Allowed in CACHELIST
 - CREATE
 - Comments
 - Conditional Compiler Directives
 - INCLUDE Directives



CACHELIST/CACHELISTEND

- CREATE GUI Objects Supported
- All Objects Except
 - AUTOMATION
 - DIALOG
 - FLOATMENU
 - MENU
 - SUBMENU
 - VARIANT



CACHELIST/CACHELISTEND

- Nested CACHELIST Not Allowed



Rules For CREATE

- CREATE WINDOW Must Be First
 - It is used by all other CREATEs
 - CREATE WIN;GUI...
- No CREATE WINDOW in CACHELIST
 - All CREATE Statements
 - Must Use Same WINDOW Reference
 - Or Not Use a WINDOW Reference



Rules For CREATE

- WINDOW Array Reference
- Same must be used in all CREATEs



Example 1

WIN **WINDOW**

ET **EDITTEXT**

ET1 **EDITTEXT**

.

CACHELIST

CREATE **WIN=1:20:5:50**

CREATE **WIN;ET=1:2:5:10**

CREATE **WIN;ET1=6:7:5:10**

CACHELISTEND



Example 2

WIN WINDOW

ET EDITTEXT

ET1 EDITTEXT

.

CACHELIST

CREATE ET=1:2:5:10

CREATE ET1=6:7:5:10

CACHELISTEND



Example 3

```
WIN      WINDOW
ET       EDITTEXT
ET1      EDITTEXT
.
.
.
CACHELIST
    CREATE      WIN;ET=1:2:5:10
    CREATE      WIN;ET1=6:7:5:10
; .ERR. ....CREATE      WIN=1:20:5:50
CACHELISTEND
```



Example 4

WINARR **WINDOW** (3)

ET **EDITTEXT**

ET1 **EDITTEXT**

NDX2 **FORM** "2"

.

CREATE **WINARR (2)=1:20:5:50**

.

CACHELIST

CREATE **WINARR (NDX2) ;ET=1:2:5:10**

CREATE **WINARR (NDX2) ;ET1=6:7:5:10**

CACHELISTEND



Example 5

WINARR	WINDOW	(3)
ET	EDITTEXT	
ET1	EDITTEXT	
NDX2	FORM	"2"

CACHELIST

CREATE **WINARR (2) ;ET=1:2:5:10**

CREATE **WINARR (2) ;ET1=6:7:5:10**

CACHELISTEND



CONNECTION RECOVERY

- Receive Timeout
- Socket Closed
- Reconnection Established
- Message Posted In Log



- Unix Client Utility
 - DISPLAY
 - KEYIN
 - NO GUI
 - Character Based Applications



MISCELLANEOUS

- Support GETFNAME at Client
- COLLECTION
 - Improve Performance
- INSERTITEM
- SETITEM
- SETPROP

