Lightning Talk

Use of CA Plex Model API

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PLEX2E.COM COMMUNITY
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HAWKBRIDGE

Client Infrastructure

Client / Server:

- IBM i (AS400) Servers
- Windows PC Clients

Software Updates Distribution (DevOps)

Development:

- Portugal

Tests/QA/Production Environments:

- Portugal
- Greece
- Egypt
- Saudi Arabia
- Morocco
- Spain

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Object Collection and Distribution

Server Objects:

- Collected and distributed manually
- Manually updated by SysAdmin

Client Objects:

- DLLs / PNLs / EXEs
- How to collect the correct objects in a controlled way ?
- Deployed objects would have to be fetched by a “check for updates” mechanism

Know what objects to collect

Plex Lists:

– Are the main repository for logical object collection at development time

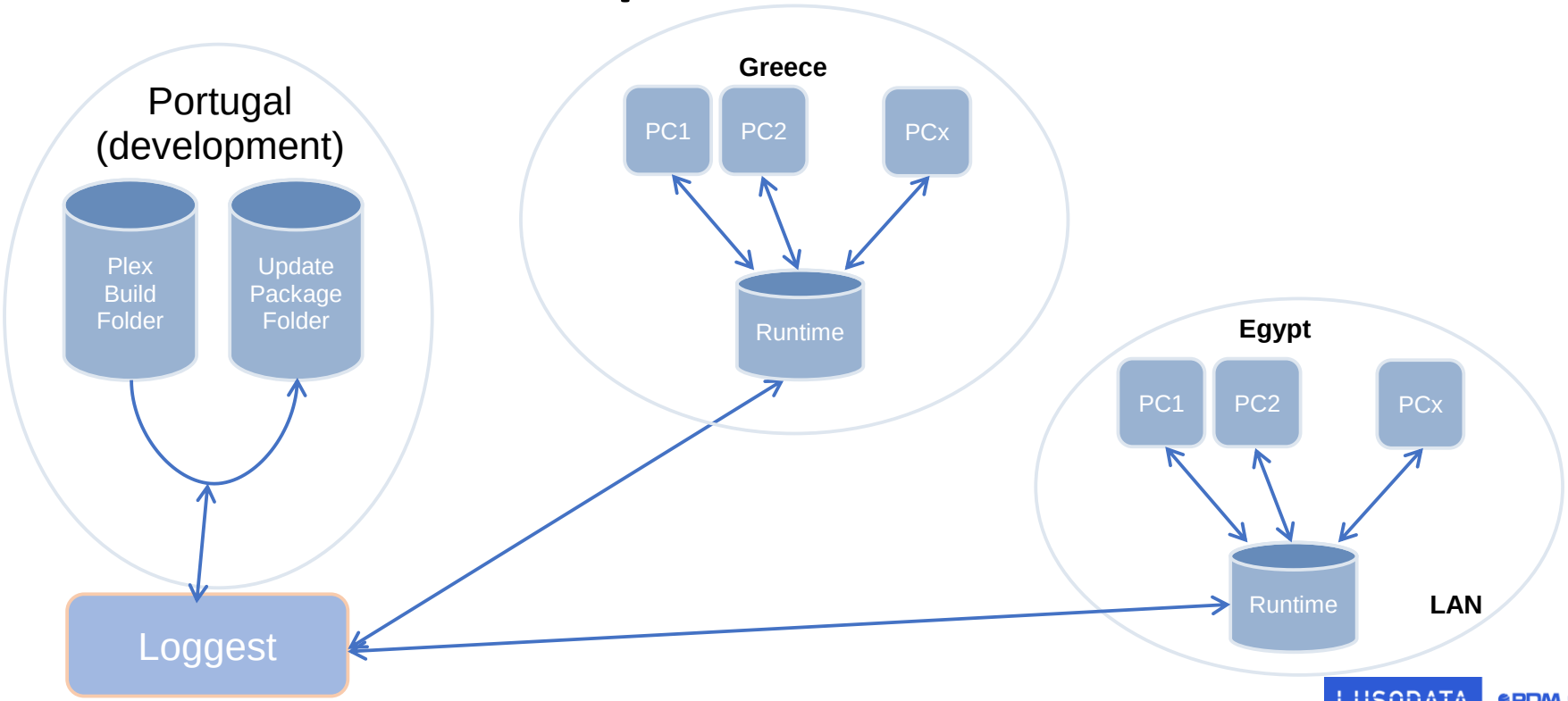
– Functions in the list are compiled, analyzed and their DLLs/PNLs stored inside “Update Packages”.

Solution:

- Make use of “CA Plex Model API” to process those lists

- Develop a Plex App, called: “LogGest”

Software Updates Distribution



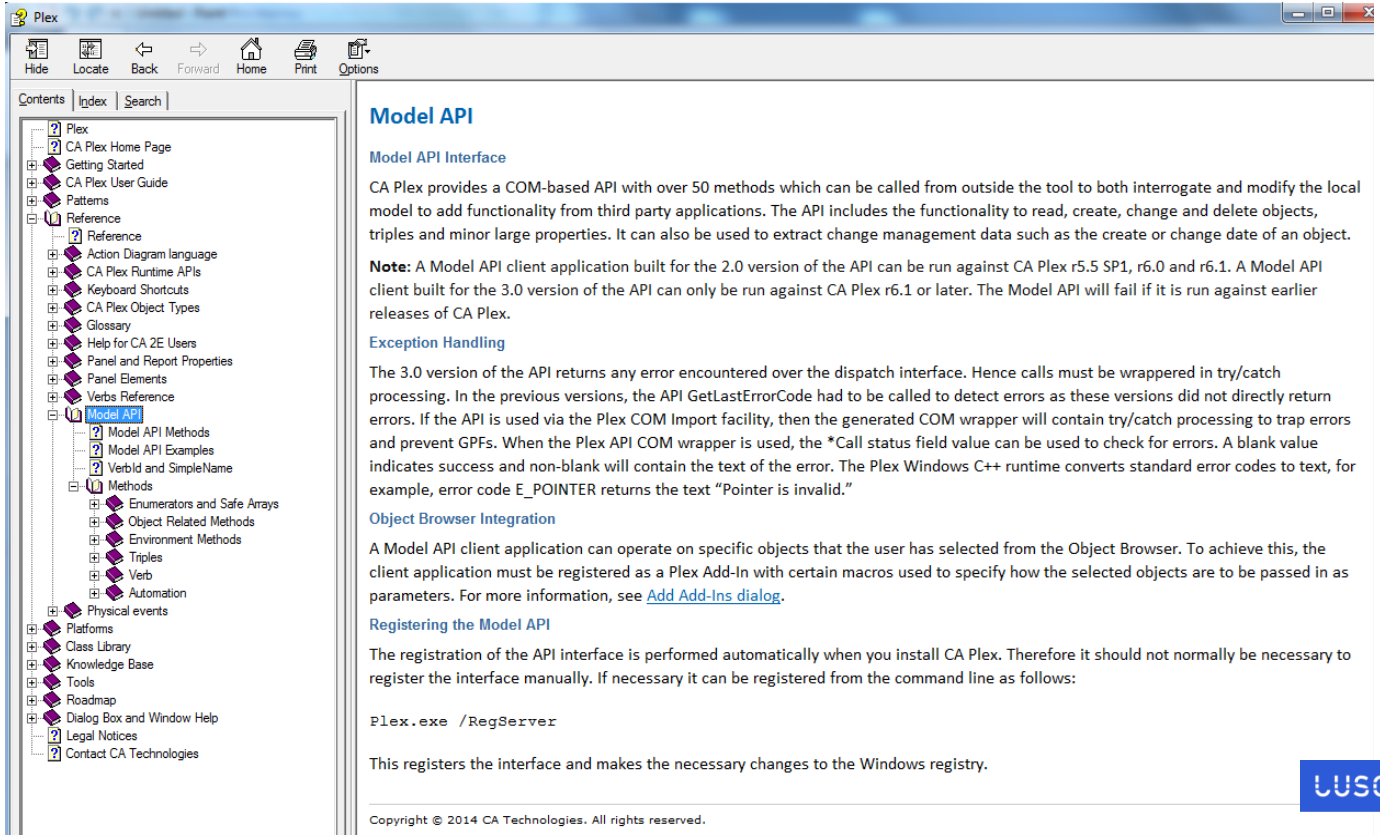
The Model API (using C++)

Plex Model API: COM-based API with over 50 methods

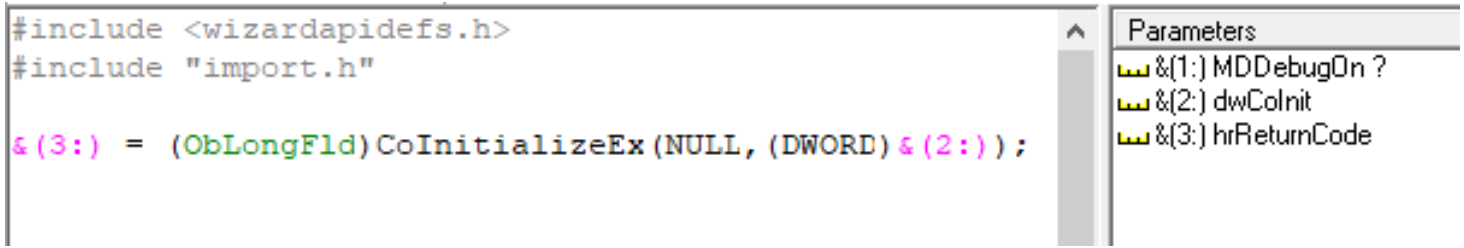
- Allows external applications to interrogate and even modify Local Models.
- Can be used to extract “Change Management” data
- Documented in Plex Help
- Used version 1.0 back in 2007

Current Version is 3.0, has better exception handling.

Plex Model API Documentation



Plex Model API – some source codes




```
&(2:) -> Concurrency Level (usually, COINIT_MULTITHREADED)
&(3:) -> Return Code (S_OK is good)
```

Plex Model API – get List Ptr

```
#include <wizardapidefs.h>
#include "import.h"
{

    int ret_val;
    long listobject = 0;

    try {
        IPlexAPIPtr p(__uuidof(PlexAPI));
        ret_val = p->FindObj((LPCTSTR)&(1:), _TypeList, &listobject);

        p = NULL;
    }
    catch (_com_error e) {
       AfxMessageBox(e.ErrorMessage());
    }


    &(2:) = (ObLongFld)listobject;
}
```

List Name (parameter 1)

List object pointer (used by other APIs)

Parameters

- &(1:) LG List Name
- &(2:) LG List Ptr

Plex Model API – get FNC name

```
#include <wizardapidefs.h>
#include "import.h"
#include <atlconv.h>

#ifndef av_USES_CONVERSION
#define av_USES_CONVERSION
USES_CONVERSION;
#endif
{
&(2:) = " ";


    int ret_val;

    try {
        IPlexAPIPtr p(__uuidof(PlexAPI));
        BSTR name = 0;
        ret_val = p->GetObjName((long)&(1:), &name);

        &(2:) = (LPCSTR)W2A(name);

        p = NULL;
    }
    catch (_com_error e) {
       AfxMessageBox(e.ErrorMessage());
    }

}
```

Function object pointer

Function's name

Parameters

&(1:) LG Object Ptr

&(2:) LG Object Name

Plex Model API – last step

Unitialize (free) COM

```
CoUninitialize();
```


LogGest DEMO

Contact

to fill in

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