

Welcome

To Advance through Presentation  
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# Sherlock Plug-ins

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User Experience Engineering

# Sherlock Plug-ins

- Find by Content
- Search Internet



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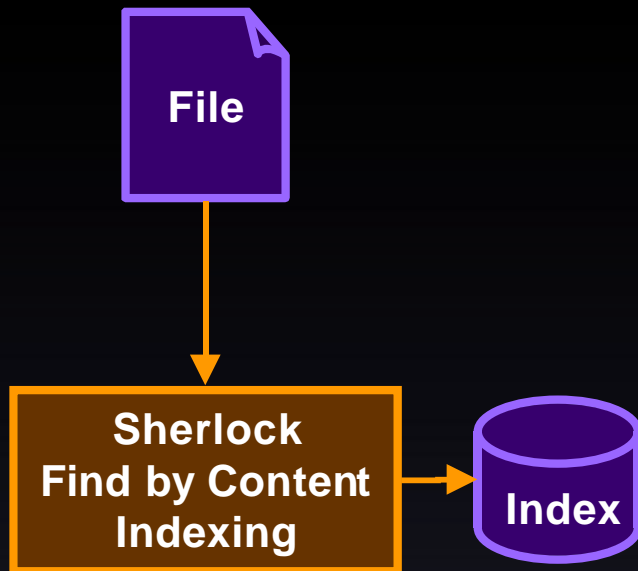


# Find by Content

- Find files based on contents
- Summarize a document
- Indexing required



# Content Indexing



- Creates an index of terms
- Reads data fork directly
- Doesn't know file format

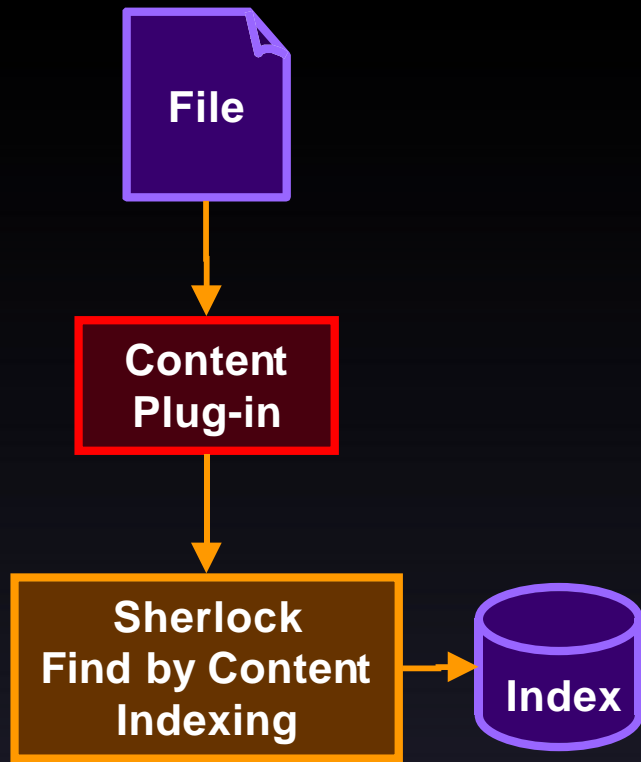


# Issues

- Text Encoding
- Language
- File Format
- Compressed Text



# Content Plug-ins



- Introduced in Mac OS 8.6
- Knows the file format
- Extracts the text content
- Provides language and encoding information





# Examples

- HTML Text Extractor
- PDF Text Extractor



# Results

- Finding files works better
- Summarizing documents works better





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# Demo

Eric Koebler

Sherlock Engineer

User Experience Engineering

# Why Create One?

- Better customer experience
- Find your application's documents
- Enable document summaries
- Easy to create



# How to Create a Content Plug-in



- Create a shared library
- Export a few functions (9)
- Add a resource (1)
- Put it in a special folder



# How to Create a Content Plug-in



- Create a shared library
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# Create a Shared Library

- Creator: 'fndf'
- Type: 'fbce'
- Fragment Name: IATextExtractor
- Headers export using `#pragma`



# Headers

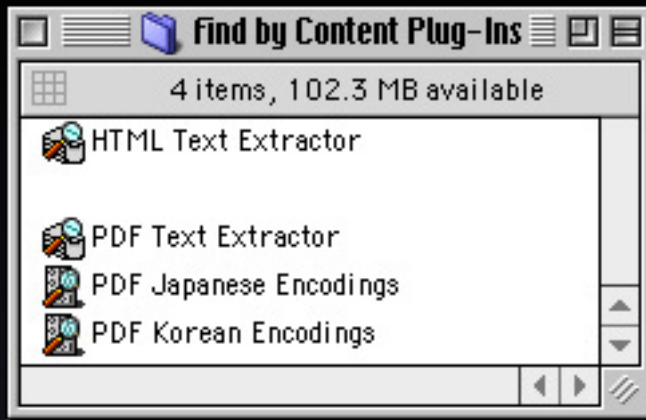
- Available now at developer seed site
- Forthcoming in Universal Interfaces

```
#include "IAExtractorTypes.h"  
#include "IAExtractorExports.h"
```





# How to Create a Content Plug-in



- Create a shared library
- **Export a few functions (9)**
- Add a resource (1)
- Put it in a special folder



# Functions

- General (5)
- Document (4)



# General Functions

- IAPuginInit
- IAPuginTerm
- IAGetExtractorVersion
- IACountSupportedDocTypes
- IAGetIndSupportedDocType



# General Refcon

- IAExtractorTypes.h

```
typedef struct OpaqueIAPluginRef* IAPluginRef;
```

- Your code

```
struct OpaqueIAPluginRef  
{  
    /* your structure definition here */  
};
```



# General Functions

- `IAPuginInit`
- `IAPuginTerm`
- `IAGetExtractorVersion`
- `IACountSupportedDocTypes`
- `IAGetIndSupportedDocType`



# IAPuginInit

```
IAResult IAPuginInit(  
    IAPuginInitBlockPtr initBlock,  
    IAPuginRef* outPluginRef)  
{  
    gAllocProc = initBlock->Alloc;  
    gFreeProc = initBlock->Free;  
    gIdleProc = initBlock->Idle;  
  
    *outPluginRef = 0;    /* a refcon */  
    return errIARNoErr;  
}
```



# IAPPluginTerm

```
IAResult IAPPluginTerm(  
    IAPPluginRef inPluginRef)  
{  
    /* clean-up code here */  
  
    return errIARNoErr;  
}
```



# IAGetExtractorVersion

```
IAResult IAGetExtractorVersion(  
    IAPlugInRef inPluginRef,  
    UInt32* outPluginVersion)  
{  
    *outPluginVersion = kIAExtractorVersion1;  
    return errIAResultNoErr;  
}
```





# General Functions

- IAPuginInit
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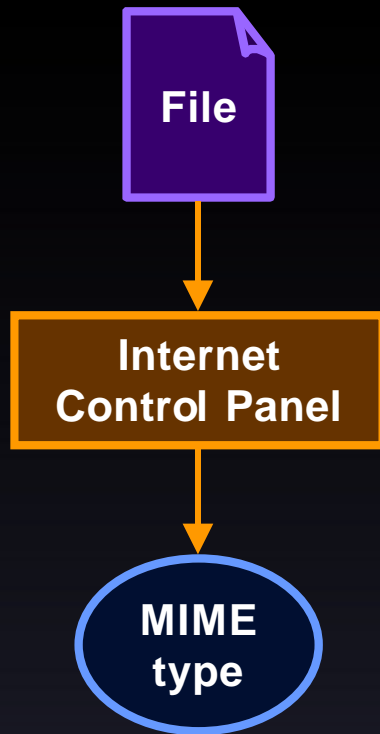


# MIME Types

- RFC 1521
- Examples
  - **text/html**
  - **application/pdf**
- Internet control panel



# How Plug-in Is Chosen



- Extension
- Type
- Creator



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