Documenting the Source

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Documenting the source

1. Some theory
   - Types of documentation
2. Technical Documentation
   - Samba API documentation
   - Get your hands dirty

Documenting Samba

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Types of documentation

1. Requirements
2. Architecture/Design
3. Technical
4. End User
5. Marketing

Requirements Documentation

Statements that identify attributes, capabilities, characteristics, or qualities of a system.

- Microsoft (Protocol) Documentation
- Samba Torture Suite
- Bugzilla

Architecture/Design Documentation

Overview of the software.

- Hmm?!

Technical Documentation

Documentation of code, algorithms, interfaces, and APIs.

- That's what we need!
- This makes our lifes easier
- This attracts more developers

End User Documentation

Manuals for the end-user, system administrators.

- Samba HOWTO Collection
- Manpages
- Commandline help output

Marketing Documentation

How to market the product.

- How to involve more people
- How to inform people

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Documented APIs

- Which public APIs are documented?

Why should I document my function?

What does this macro do?

- `#define talloc_steal(ctx, ptr) _talloc_steal_loc((ctx),(ptr), __location__)`

talloc_steal

Change a talloc chunk's parent.

talloc_steal

What are the arguments I have to pass?

- `#define talloc_steal(ctx, ptr) _talloc_steal_loc((ctx),(ptr), __location__)`

talloc_steal

new_ctx – The new parent context.

ptr – The talloc chunk to move.

talloc_steal

What does the function return?

- `void *_talloc_steal_loc(const void *new_ctx, const void *ptr, const char *location)`

talloc_steal

Returns the pointer that you pass it. It does not have any failure modes.

talloc_steal

What if there is more than one parent?

talloc_steal

If you try and call talloc_steal() on a pointer that has more than one parent then the result is ambiguous.

Note: It is possible to produce loops in the parent/child relationship if you are not careful with talloc_steal().

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Doxygen

A documentation system for C, C++, Java, Objective-C, Python, IDL (Corba and Microsoft flavors), Fortran, VHDL, PHP, C#

- Generates HTML, PDF, Manpages
- Generate dependency graphs

Vim and Doxygen

- DoxygenToolkit
- http://www.vim.org/scripts/script.php?script_id=987

A home for the API documentation

Create http://api.samba.org/?

Questions & Answers

No time left? Write an email or query my on IRC

- http://www.samba.org/~asn/