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Part I

ASN.1 Basics

Chapter 1

Abstract Syntax Notation:

the root of the registration tree where the only thing of interest is some of the tree's subsequence.

```
this-document
this-example
    this-documentssorted-examples(0)his-example(1)
```

1.2 Some ofhe ASN.1ringypes

1.2.1 The IA5Stringype

This is essentially the ASCII, with 128 character codes available (7 lower bits of 8-bit byte).

1.2.2 The UTF8Stringype

This is the character string which encodes the full Unicode range (4 bytes) using multibyte character sequences.

1.2.3 The NumericStringype

This type representshe character string with the alphabet consisting of numbers ("0" to "9") and a space.

1.2.4 The PrintableStringype

The character string with the following alphabet: space, "'

Part II

Using the ASN.1 Compiler

Chapter 2

Introduction to the ASN.1 Compiler

```
asn1c <spec.asn1>
```

tion

First of all, you would want to th

```
Rectangle_t *
simple_deserializer(void *buffer, size_t buf_size) {
    Rectangle_t *rect = 0;    /* Note this 0! */
    ber_dec_rval_t rval;

    rval = asn1_DEF_Rectangle->ber_decoder(
          &asn1_DEF_Rectangle,
          (void **)&rect,
          buffer, buf_size,
          0);
```

2.2.2.2 Encoding DER

2.2.2.5 Freeing the target structure

Freeing the structure is slightly more complex than it may seem to. When the ASN.1 structure is freed, all the members of the structure and their submembers etc etc are recursively freed too. But it might not be feasible to free the structure itself. Consider the following case:

Bibliography

[Dub00] Olivier Dubuisson –