

Internet Open Trading Protocol (IOTP)  
Version 1, Errata

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Abstract

Since the publication of the RFCs specifying Version 1.0 of the Internet Open Trading Protocol (IOTP), some errors have been noted. This informational document lists these errors and provides corrections for them.

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## 1. Introduction

The Internet Open Trading Protocol (IOTP), Version 1.0, is specified in [RFC 2801, 2802, 2803]. It provides a payment system independent framework for Internet commerce oriented to consumer to business transactions. It provides mechanism for different portions of the business function, such as fulfillment or payment handling, to be distributed or outsourced. It does not require a prior relationship between the consumer and business.

Several errors have been noted in the IOTP v1.0 specification, particularly RFC 2801, which was the largest RFC ever issued. These are listed, with their fix, in this document.

## 2. DTD Errata

### 2.1 PackagedContent Element

Attribute types are swapped.

OLD/INCORRECT:

```
!ELEMENT PackagedContent (#PCDATA) >
<!ATTLIST PackagedContent
    Name          CDATA          #IMPLIED
    Content        NMTOKEN       "PCDATA"
    Transform      (NONE|BASE64) "NONE" >
```

NEW/CORRECT:

```
<!ELEMENT PackagedContent (#PCDATA) >
<!ATTLIST PackagedContent
    Name          NMTOKEN       #IMPLIED
    Content        CDATA        "PCDATA"
    Transform      (NONE|BASE64) "NONE" >
```

## 2.2 The Element called Attribute

Incorrect element content specification syntax.

### OLD/INCORRECT:

```
<!ELEMENT Attribute ( ANY ) >
<!ATTLIST Attribute
    type                NMTOKEN                #REQUIRED
    critical            ( true | false )        #REQUIRED
>
```

### NEW/CORRECT

```
<!ELEMENT Attribute ANY >
<!ATTLIST Attribute
    type                NMTOKEN                #REQUIRED
    critical            ( true | false )        #REQUIRED
>
```

## 3. Other Errata

### 3.1 Re: Combining Authentication Transactions with other Transactions

Section 9.1.13. page 234, restarted->continued:

#### OLD/INCORRECT:

if the Authentication transaction is successful, then the original IOTP Transaction is restarted

#### NEW/CORRECT:

if the Authentication transaction is successful, then the original IOTP Transaction is continued

### 3.2 Type attribute of Element called Attribute

Section 7.19.1, Page 150, insufficient list of signature types:

#### OLD/INCORRECT:

There must be one and only one Attribute Element that contains a Type attribute with a value of IOTP Signature Type and with content set to either: OfferResponse, PaymentResponse, DeliveryResponse, AuthenticationRequest, AuthenticationResponse, PingReq or PingResponse; depending on the type of the signature.

## NEW/CORRECT:

There must be one and only one Attribute Element that contains a Type attribute with a value of IOTP Signature Type and with content set to either: OfferResponse, PaymentResponse, DeliveryResponse, AuthenticationRequest, AuthenticationResponse, PingReq, PingResponse, AuthenticationStatus, InquiryRequest, or InquiryResponse; depending on the type of the signature.

AND a similar change extending the list of values in Section 12.1, Page 262.

And at Section 6.1.2, Page 82, add the following:

|                      |          |
|----------------------|----------|
| AuthenticationStatus | any role |
| InquiryRequest       | any role |
| InquiryResponse      | any role |

#### 4. Security Considerations

The errata listed herein are not particularly security related. Never the less, incorrect implementations due to uncorrected errors in the specification may compromise security.

#### 5. References

- [RFC 2801] Burdett, D., "Internet Open Trading Protocol - IOTP Version 1.0", RFC 2801, April 2000.
- [RFC 2802] Davidson, K. and Y. Kawatsura, "Digital Signatures for the v1.0 Internet Open Trading Protocol (IOTP)", RFC 2802, April 2000.
- [RFC 2803] Maruyama, H., Tamura, K. and N. Uramoto, "Digest Values for DOM (DOMHASH)", RFC 2803, April 2000.

#### 6. Acknowledgements

Thanks to the following people for reporting or responding to reports of these errata:

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