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The 'acct' URI Scheme
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Abstract

This document defines the 'acct' URI scheme as a way to identify a user's account at a service provider, irrespective of the particular protocols that can be used to interact with the account.

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1. Introduction

Existing URI schemes that enable interaction with, or that identify resources associated with, a user's account at a service provider are tied to particular services or application protocols. Two examples are the 'mailto' scheme (which enables interaction with a user's email account) and the 'http' scheme (which enables retrieval of web files controlled by a user or interaction with interfaces providing information about a user). However, there exists no URI scheme that generically identifies a user's account at a service provider without specifying a particular protocol to use when interacting with the account. This specification fills that gap.

2. Rationale

During formalization of the WebFinger protocol [[I-D.ietf-appsawg-webfinger](#)], much discussion occurred regarding the appropriate URI scheme to include when specifying a user's account as a web link [[RFC5988](#)]. Although both the 'mailto' [[RFC6068](#)] and 'http' [[RFC2616](#)] schemes were proposed, not all service providers offer email services or web interfaces on behalf of user accounts (e.g., a microblogging or instant messaging provider might not offer email services, or an enterprise might not offer HTTP interfaces to information about its employees). Therefore, the discussants recognized that it would be helpful to define a URI scheme that could be used to generically identify a user's account at a service provider, irrespective of the particular application protocols used to interact with the account. The result was the 'acct' URI scheme defined in this document.

3. Definition

The syntax of the 'acct' URI scheme is defined under [Section 4](#) of this document. Although 'acct' URIs take the form "user@host", the scheme is designed for the purpose of identification instead of interaction (regarding this distinction, see [Section 1.2.2 of \[RFC3986\]](#)). The "Internet resource" identified by an 'acct' URI is a user's account hosted at a service provider, where the service provider is typically associated with a DNS domain name. Thus a particular 'acct' URI is formed by setting the "user" portion to the user's account name at the service provider and by setting the "host" portion to the DNS domain name of the service provider.

Consider the case of a user with an account name of "foobar" on a microblogging service "status.example.net". It is taken as convention that the string "foobar@status.example.net" designates

that account. This is expressed as a URI using the 'acct' scheme as "acct:foobar@status.example.net".

It is not assumed that an entity will necessarily be able to interact with a user's account using any particular application protocol, such as email; to enable such interaction, an entity would need to use the appropriate URI scheme for such a protocol, such as the 'mailto' scheme. While it might be true that the 'acct' URI minus the scheme name (e.g., "user@example.com" derived from "acct:user@example.com") can be reached via email or some other application protocol, that fact would be purely contingent and dependent upon the deployment practices of the provider.

Because an 'acct' URI enables identification only and not interaction, it cannot be dereferenced directly. Any protocol that might use the 'acct' URI scheme, such as the WebFinger protocol [[I-D.ietf-appsawg-webfinger](#)] or the Simple Web Discovery protocol [[I-D.jones-simple-web-discovery](#)], is responsible for specifying how an 'acct' URI is dereferenced in the context of that protocol. For example, an 'acct' URI might be passed as a parameter in an HTTP request and the service might retrieve the relevant information associated with the account identified by that URI and then provide that information to the requesting entity in an HTTP response.

[4.](#) IANA Considerations

In accordance with the guidelines and registration procedures for new URI schemes [[RFC4395](#)], this section provides the information needed to register the 'acct' URI scheme.

[4.1.](#) URI Scheme Name

acct

[4.2.](#) Status

permanent

[4.3.](#) URI Scheme Syntax

The 'acct' URI syntax is defined here in Augmented Backus-Naur Form (ABNF) [[RFC5234](#)], borrowing the 'userinfo' and 'host' rules from [[RFC3986](#)]:

```
acctURI      = "acct" ":" userinfo "@" host
```


[4.4.](#) URI Scheme Semantics

The 'acct' URI scheme identifies accounts hosted at service providers. It is used only for identification, not interaction. A protocol using the 'acct' URI scheme is responsible for specifying how an 'acct' URI is to be dereferenced in the context of that protocol. There is no media type associated with the 'acct' URI scheme.

[4.5.](#) Encoding Considerations

The 'acct' URI scheme allows any character from the Unicode repertoire [[UNICODE](#)] encoded as UTF-8 [[RFC3629](#)] and then percent-encoded into valid ASCII [[RFC20](#)] as specified in [[RFC3986](#)]. Note that domain labels need to be encoded as A-labels (see [[RFC5890](#)]) in order to support internationalized domain names (IDNs).

[4.6.](#) Applications/Protocols That Use This URI Scheme Name

At the time of this writing, only the WebFinger protocol uses the 'acct' URI scheme. However, use is not restricted to the WebFinger protocol, and the scheme might be considered for use in other protocols, such as Simple Web Discovery.

[4.7.](#) Interoperability Considerations

There are no known interoperability concerns related to use of the 'acct' URI scheme.

[4.8.](#) Security Considerations

See [Section 5](#) of RFCXXXX. [Note to RFC Editor: please replace XXXX with the number issued to this document.]

[4.9.](#) Contact

Peter Saint-Andre, psaintan@cisco.com

[4.10.](#) Author/Change Controller

This scheme is registered under the IETF tree. As such, the IETF maintains change control.

[4.11.](#) References

None.

5. Security Considerations

Because the 'acct' URI scheme does not directly enable interaction with a user's account at a service provider, possible security concerns are minimized.

Protocols that make use of 'acct' URIs are responsible for defining security considerations related to such usage, e.g., the risks involved in dereferencing an 'acct' URI and the authentication and authorization methods that could be used to control access to personally identifying information.

6. References

6.1. Normative References

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- [UNICODE] The Unicode Consortium, "The Unicode Standard, Version 6.1", 2012, <<http://www.unicode.org/versions/Unicode6.1.0/>>.

6.2. Informative References

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Transfer Protocol -- HTTP/1.1", [RFC 2616](#), June 1999.

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- [RFC5988] Nottingham, M., "Web Linking", [RFC 5988](#), October 2010.
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[Appendix A](#). Acknowledgements

The 'acct' URI scheme was originally defined in [[I-D.ietf-appsawg-webfinger](#)]; the authors of that specification are gratefully acknowledged.

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