

Enabling SAML for Service Provider

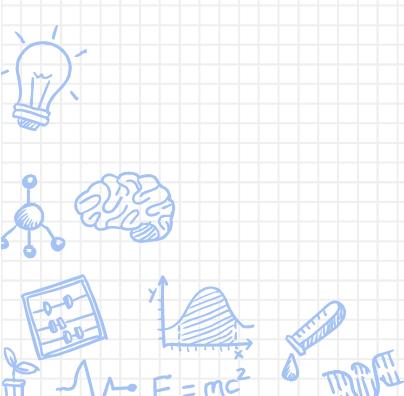
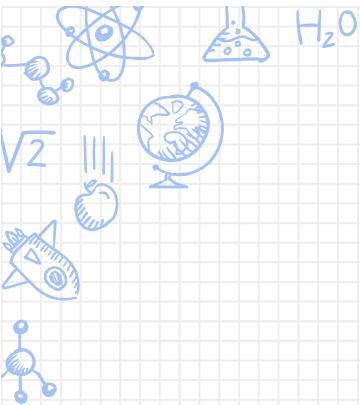




Contact

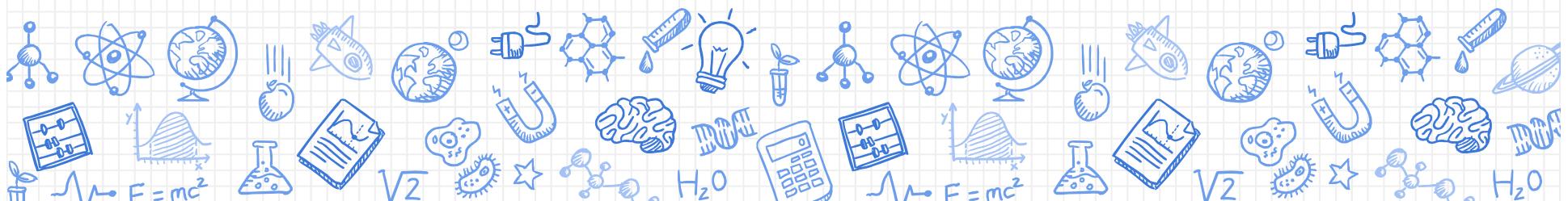
Jinyong JO and KyoungMin Lee

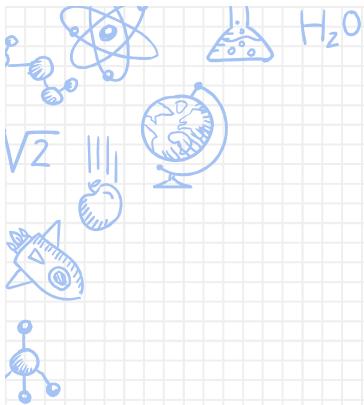
You can find us at coreen@kreonet.net



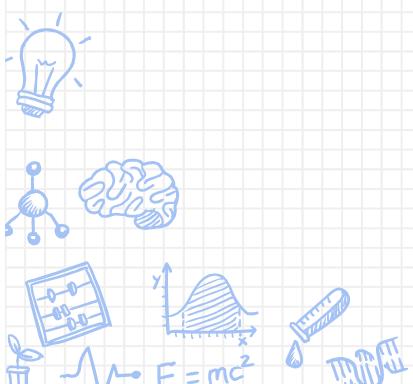
Join KAFE as a Service Provider

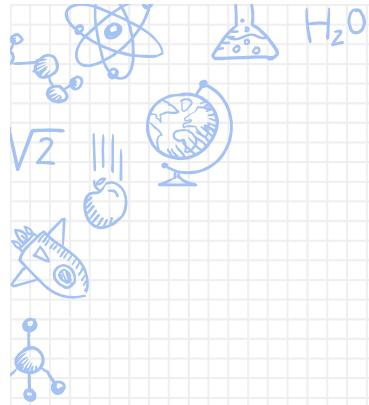
How to integrate SAML
with your Web applications





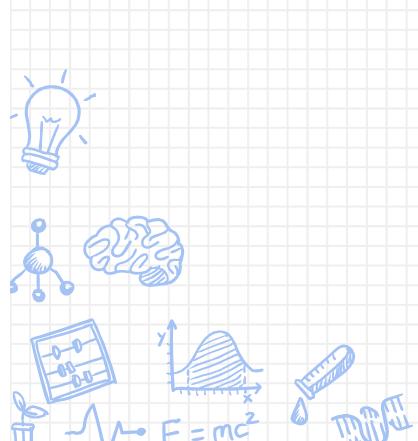
KAFE(Korean Access FEderation)
technically supports Service
Providers for SAML integration





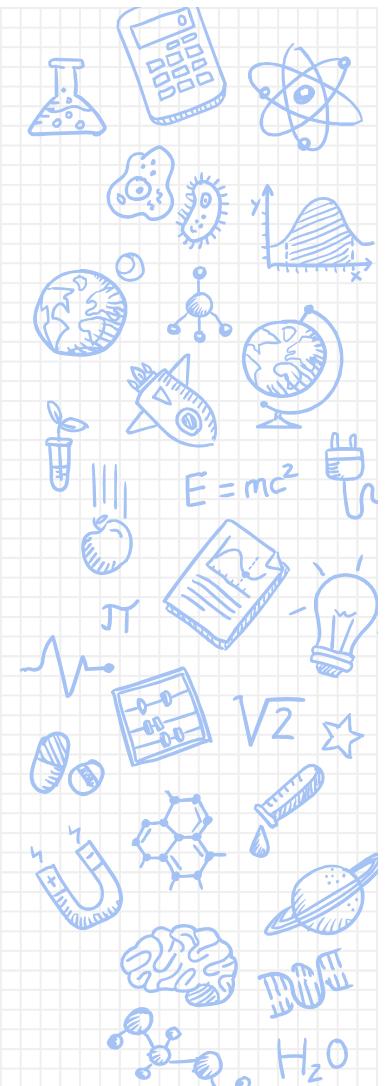
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In any case, ...

- ✗ Enabling NTP (Network Time Protocol) is mandatory
 - We use time.kriss.re.kr

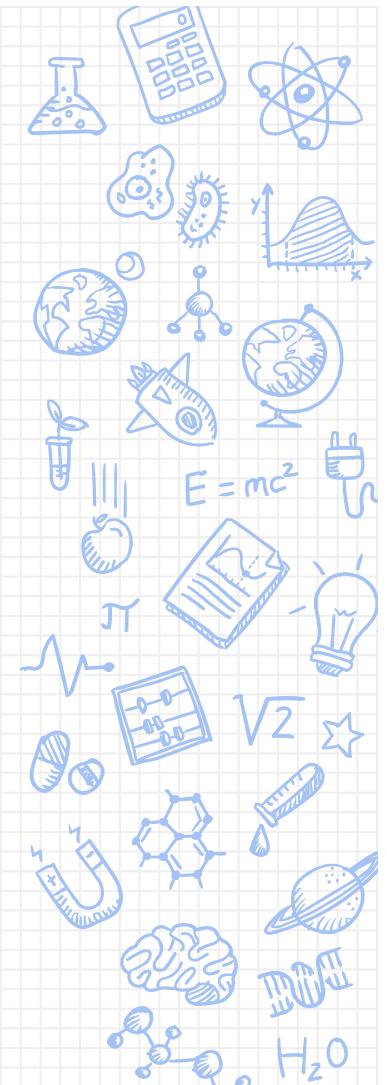


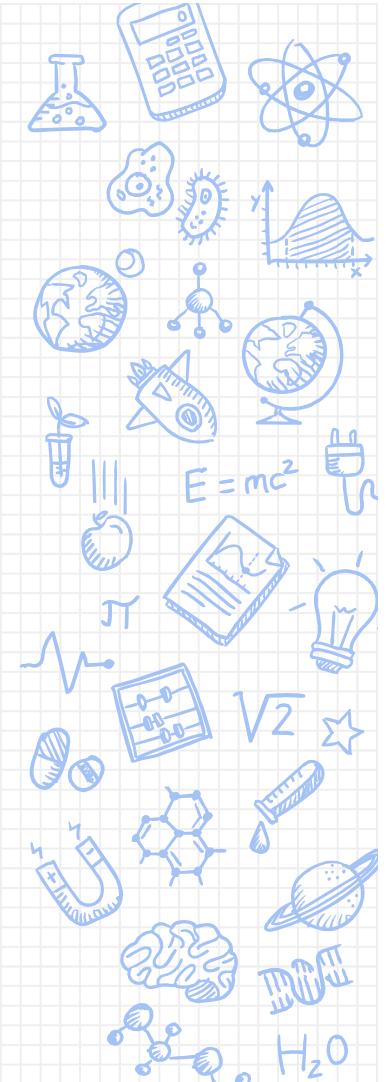
Support for the integration of SAML and Web Applications under...

- ✗ Linux
- ✗ Apache, Tomcat, or Jetty Web Container
- ✗ Almost all Web Programming Language

Windows/IIS support will be, but not now

[July 2016]





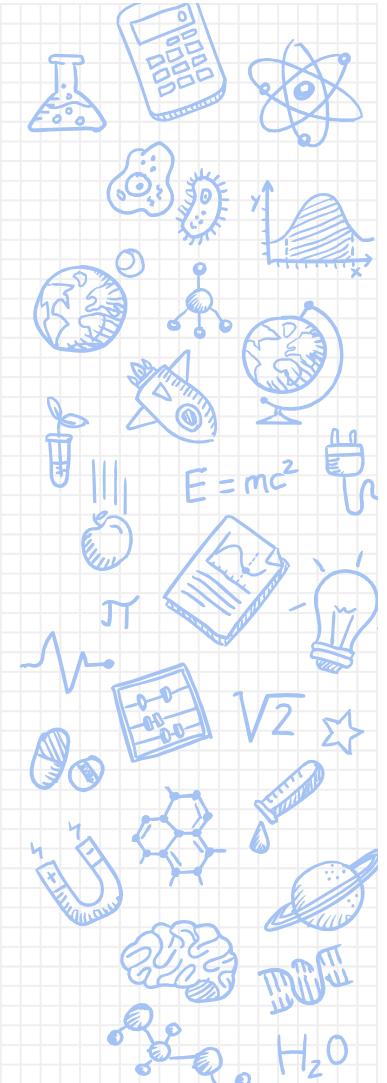
SAML software we recommend

- ✗ simpleSAMLphp
- ✗ Shibboleth [support will be available soon]

Need more verification however possible

- ✗ OIOSAML
- ✗ Spring Security SAML extensions

[July 2016]



Three Ways of SAML integration KAFE supports

✗ Memcached – distributed shared memory

[Use case] Web app is implemented with a different computer language from SAML software but both are running on the same Web container (e.g., Apache)

✗ Web proxy

[Use case] Web app and SAML software are running over different Web containers (e.g., SAML software on Apache and Web app on Tomcat)

✗ API (Application Programming Interface)

[Use case] Web app and SAML software use the same computer language (e.g., Web app written with PHP and SAML software with PHP as well)

Web Proxy based Integration KAFE supports

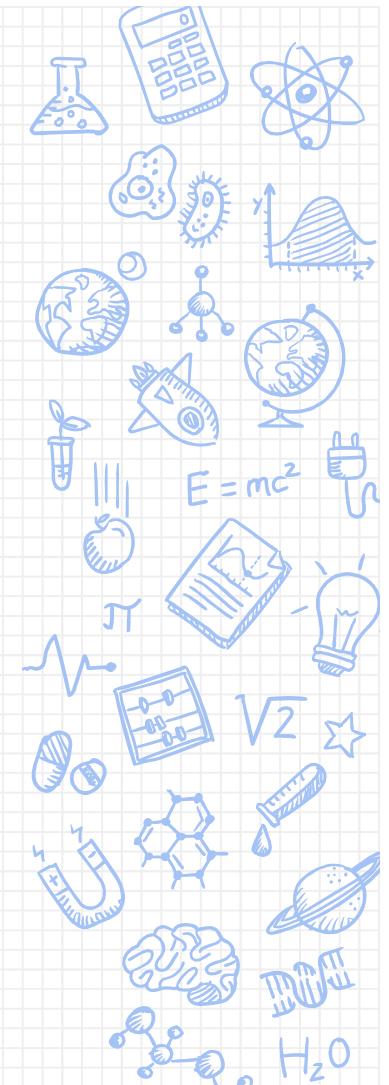
[Skip Memcached] Contact coreen@kreonet.net for more information about Memcached

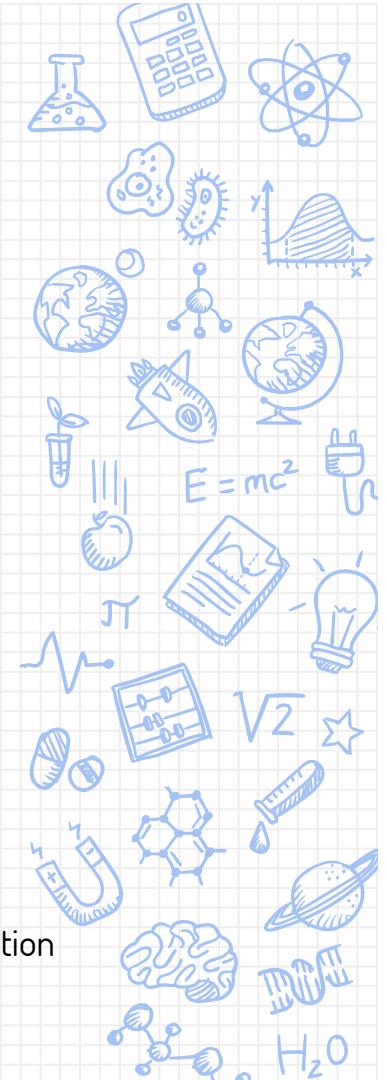
X Configuration

- SAML software: simpleSAMLphp running on Apache 2.2 or 2.4
- Web application: Java running on Jetty or Tomcat
 - ※ All SAML related actions place in Apache

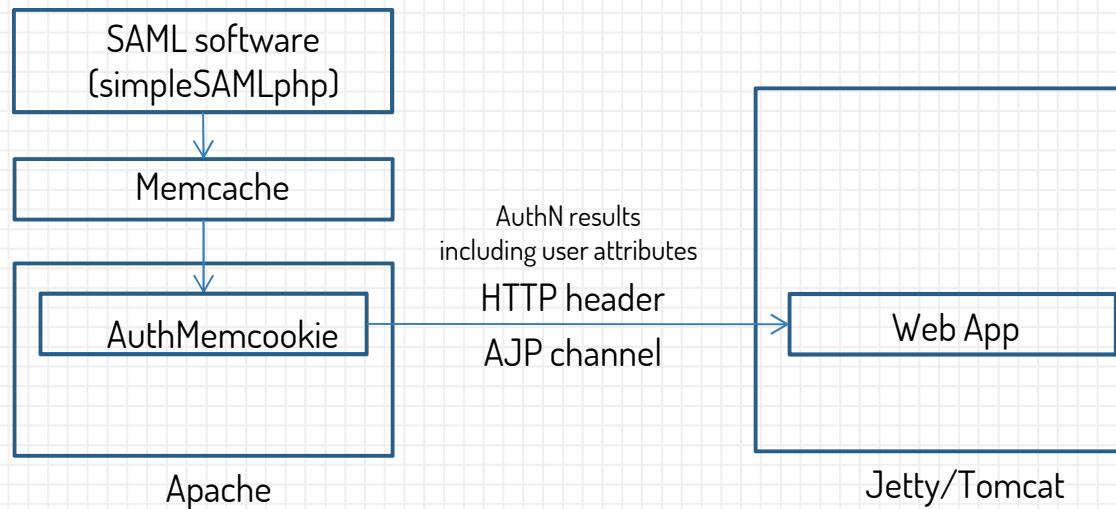
X Interface Apache and Jetty/Tomcat

- modx proxy (Jetty or Tomcat): write Auth Info on HTTP header and pass it to Jetty/Tomcat
- modx proxyx ajp (Tomcat): use ~~soft~~-band channel to transfer Auth Info.





Web Proxy based Integration KAFE supports (Contd.)



AuthMemCookie: Apache v2 authentication and authorization module

[KAFE provides]

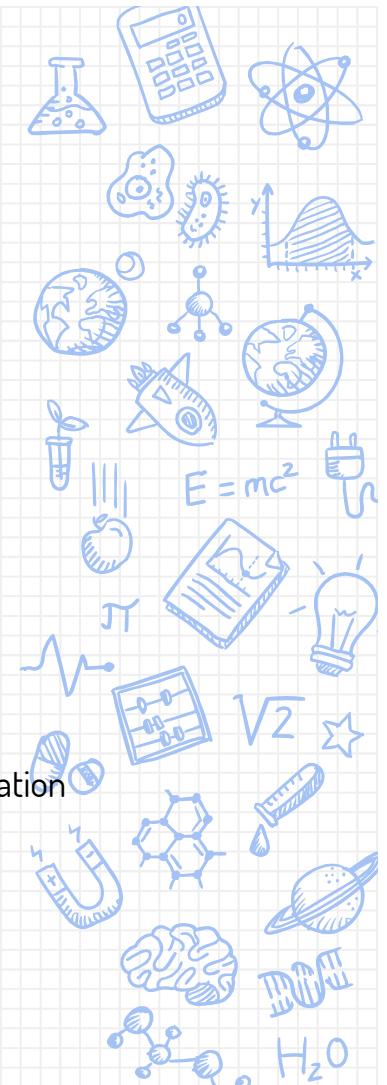
- Installation scripts to automatically complete the lefthand-side software installation and configuration
- Simple example Web App code written with Java (righthand side)
- How-to documents

API KAFE supports

- ✗ PHP API
- ✗ Java API

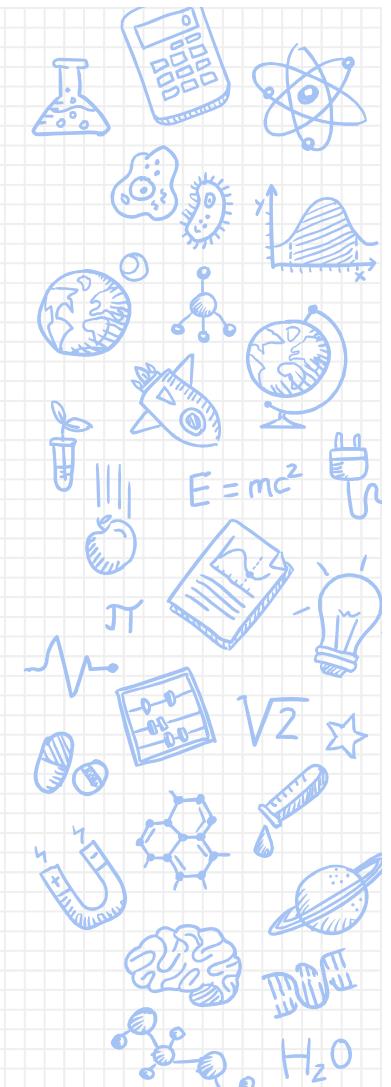
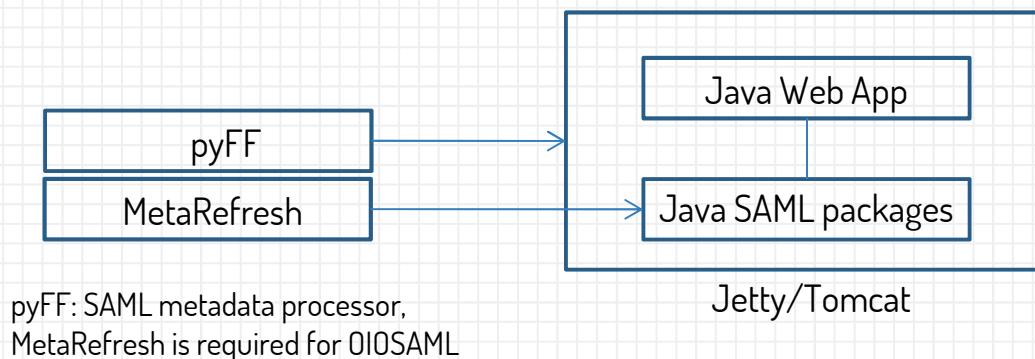
	PHP	Java
Web container	Apache 2.2/2.4	Jetty, Tomcat
SAML software	simpleSAMLphp	OIOSAML, Spring Security

- simpleSAMLphp is available on <https://simplesamlphp.org/>. Download and use without modification
- KAFE-version of OIOSAML or Spring Security SAML extensions. Some modifications include
 - Attribute filter for eduPersonTargetedID
 - OID to friendlyName map
 - Discovery service
 - Dynamic metadata-refresh and ETC.



API KAFE supports (Contd.)

X Configuration

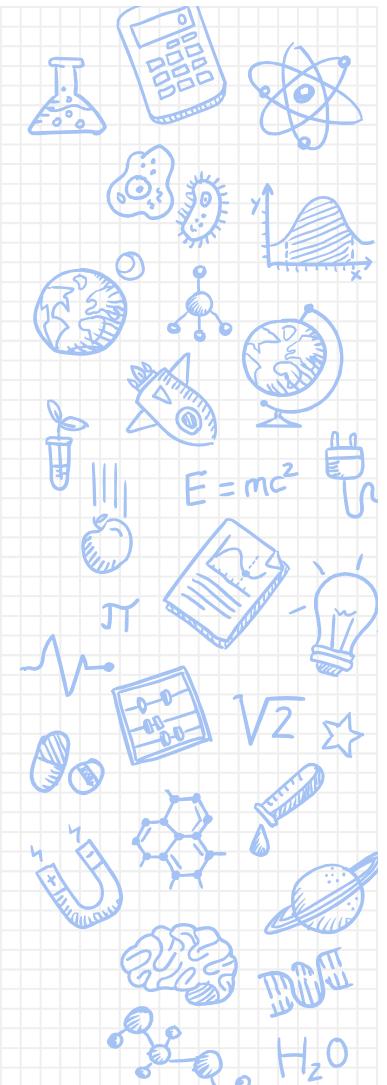


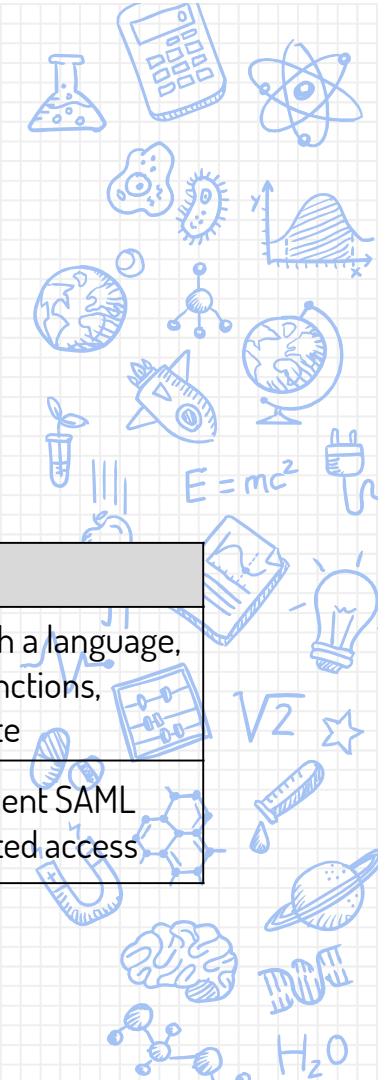
API KAFE supports (Contd.)

✗ Current known limitations of Java API

- can not check SSL certification expiration date
- can not validate metadata signature
- can not validate validUntil [will be resolved]
- [OIOSAML] incompatible HTTP GET parameter (idp=) with general Discovery Service[will be resolved]

[July 2016]



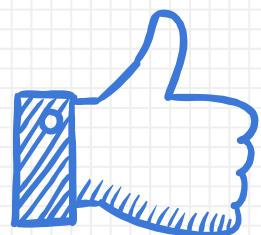
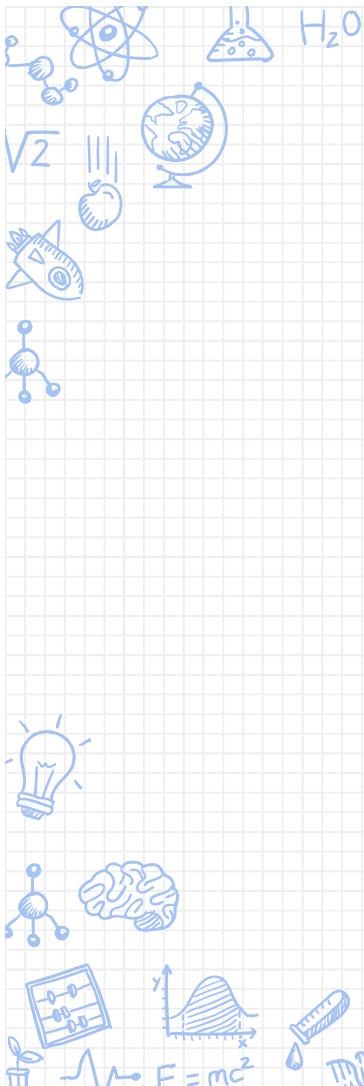


Cases: ONOS network applications (VDN)

✗ Available options

- Web proxy with modx proxy
- OIOSAML Java API

	Web proxy	OIOSAML
Pros	Apache takes all for SAML, Use of well-functioned SAML software, Easy to integrate	A single Web container with a language, DIY SAML-related functions, Easy to integrate
Cons	Hold multiple Web containers	Premature and insufficient SAML functions for N:1 federated access



Join KAFE!

Add value to your service

You can find us at

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- ✗ {jiny92, tsoc}@kisti.re.kr

