

使用审计中间件

背景

审计中间件是一个Python中间件逻辑，通过粘贴部署过滤器到服务请求处理管道中。审计中间件以CADF格式构造审计事件数据。

审计中间件支持通过oslo消息通知程序功能提供CADF审计事件。根据 *notification_driver* 配置，审计事件可以路由到消息传递基础结构（*notification_driver* = *messagingv2*），也可以路由到日志文件（*notification_driver* = *log*）。

审计中间件为每一个REST API交互创建两个事件：一个事件从请求数据中提取信息，一个事件请求结果（即响应）。

启用API请求审核

审计中间件是 *keystonemiddleware* (≥ 1.6) 库的一部分。假设Barbican部署已经使用Keystone进行令牌验证，那么审计支持只需要更改配置即可。它具有oslo消息库依赖性，因为要是改库进行审计事件传递。pyCADF库用来以CADF格式创建事件。

步骤

1. 关闭所有Barbican实例。
2. 将 *api_audit_map.conf* 复制到 */etc/barbican* 目录下
3. 编辑 */etc/barbican/barbican-api-paste.ini*

将/v1 app管道由 **barbican_api** 替换为 **barbican-api-keystone-audit** 管道：

```
[pipeline:barbican-api-keystone-audit]
pipeline = authtoken context audit apiapp
```

4. 编辑 **barbican.conf**, 更新 *notification_driver* 值。
5. 重启barbican服务

审计时间样例

如下，是对称密钥创建请求的审计事件样例

```
{
  "priority": "INFO",
  "event_type": "audit.http.request",
  "timestamp": "2015-12-11 00:44:26.412076",
  "publisher_id": "uwsgi",
  "payload": {
    "typeURI": "http://schemas.dmtf.org/cloud/audit/1.0/event",
```

```

    "eventTime": "2015-12-11T00:44:26.410768+0000",
    "target": {
      "typeURI": "service/security/keymanager/secrets",
      "addresses": [
        {
          "url": "http://{barbican_admin_host}:9311",
          "name": "admin"
        },
        {
          "url": "http://{barbican_internal_host}:9311",
          "name": "private"
        },
        {
          "url": "https://{barbican_public_host}:9311",
          "name": "public"
        }
      ],
      "name": "barbican_service_user",
      "id": "barbican"
    },
    "observer": {
      "id": "target"
    },
    "tags": [
      "correlation_id?value=openstack:7e0fe4a6-e258-477e-a1c9-0fd0921a8435"
    ],
    "eventType": "activity",
    "initiator": {
      "typeURI": "service/security/account/user",
      "name": "cinder_user",
      "credential": {
        "token": "***",
        "identity_status": "Confirmed"
      },
      "host": {
        "agent": "curl/7.38.0",
        "address": "192.168.245.2"
      },
      "project_id": "8eabee0a4c4e40f882df8efbce695526",
      "id": "513e8682f23446ceb598b6b0f5c4482b"
    },
    "action": "create",
    "outcome": "pending",
    "id": "openstack:3a6a961c-9ada-4b81-9095-90968d896c41",
    "requestPath": "/v1/secrets"
  },
  "message_id": "afc3fd93-51e9-4c80-b330-983e66962265"
}

```