```
2014-06-10 10:43:30 -0700
LtiMessage: Request Tool Registration
LaunchUrl: http://localhost:5000/lti2_tp/registrations
<div id="ltiLaunchFormSubmitArea">
   form action="http://localhost:5000/lti2_tp/registrations"
   name="ltiLaunchForm" id="ltiLaunchForm" method="post"
       encType="application/x-www-form-urlencoded">
           ncType="application/x-www-form-urlencoded">
<input type="hidden" name="lti_message_type" value="ToolProxyRegistrationRequest"/>
<input type="hidden" name="ti_version" value="LTI-2p0"/>
<input type="hidden" name="user_id" value="2"/>
<input type="hidden" name="roles" value="urn:lti:sysrole:ims/lis/SysAdmin"/>
<input type="hidden" name="roles" value="urn:lti:sysrole:ims/lis/SysAdmin"/>
<input type="hidden" name="tc_profile_url" value="http://localhost:4000/lti2_tc/tool_consumer_profiles/a259be60-d2f4-0131-6e78-20c9d07c6451"/>
<input type="hidden" name="reg_key" value="a259b730-d2f4-0131-6e78-20c9d07c6451"/>
<input type="hidden" name="reg_key" value="a259b730-d2f4-0131-6e78-20c9d07c6451"/>

            <input type="hidden" name="reg_password" value="932b1f69ae05d4cca4705e4aaafe3544"/>
            <input type="hidden" name="launch_presentation_return_url" value="http://localhost:4000/admin/tool_actions"/>
            <input type="hidden" name="launch_presentation_document_target" value="window"/>
</form>
</div>
<script language="javascript">
   document.ltiLaunchForm.submit();
</script>
                                                                                        2014-06-10 10:43:37 -0700
                                                                                        LtiService: Register ToolProxy with ToolConsumer
                                                                                        POST http://localhost:4000/lti2 tc/tools
                                                                                        Authorization: OAuth oauth_consumer_key="a259b730-d2f4-0131-6e78-20c9d07c6451", oauth_nonce="8932107465
                                                                                        Content-Type: application/vnd.ims.lti.v2.toolproxy+json
                                                                                        Content-Length: 5374
                                                                                        {\tt X-IMS-EndRegistration-ID: aceea2d0-d2f4-0131-6e5f-20c9d07c6451}
                                                                                        Body:
                                                                                        {"@context":["http://purl.imsglobal.org/ctx/lti/v2/ToolProxy","@type":"ToolProxy","@id":"ToolProxyProp
2014-06-10 10:43:47 -0700
Response: Register ToolProxy with ToolConsumer
Status: 201 Created
content-type: application/vnd.ims.lti.v2.toolproxy.id+json; charset=utf-8
content-length: 213
    "@context": "http://purl.imsglobal.org/ctx/lti/v2/ToolProxyId",
    "@type": "ToolProxy",
    "@id": "http://localhost:4000/tools/acf93780-d2f4-0131-6e78-20c9d07c6451",
    "tool_proxy_guid": "acf93780-d2f4-0131-6e78-20c9d07c6451"
2014-06-10 10:44:37 -0700
LtiMessage: Lti Launch
LaunchUrl: http://localhost:5000/echoes
<div id="ltiLaunchFormSubmitArea">
   <form action="http://localhost:5000/echoes" target="_blank"
       name="ltiLaunchForm" id="ltiLaunchForm" method="post"
       <input type="hidden" name="lti_message_type" value="basic-lti-launch-request"/>
<input type="hidden" name="resource_link_id" value="329"/>
<input type="hidden" name="user_id" value="2"/>
<input type="hidden" name="roles" value="Administrator"/>
<input type="hidden" name="launch_presentation_return_url" value="http://localhost:4000/admin/course_page?method=show&course_id=5"/>
<input type="hidden" name="launch_presentation_document_target" value="window"/>
<input type="hidden" name="context_id" value="5"/>
<input type="hidden" name="launch_presentation_locale" value="en_US"/>
<input type="hidden" name="context_label" value="npEnO1"/>
<input type="hidden" name="context_label" value="npEnO1"/>
           <input type="hidden" name="context_label" value="DPE001"/>
<input type="hidden" name="context_label" value="DPE001"/>
<input type="hidden" name="context_title" value="Design of Personal Environments 1"/>
<input type="hidden" name="lis_course_section_sourcedid" value="5"/>
<input type="hidden" name="tool_consumer_info_product_family_code" value="LuMoS"/>
<input type="hidden" name="tool_consumer_info_version" value="3.1"/>
<input type="hidden" name="custom_referrer" value="Narcissus"/>
<input type="hidden" name="custom_pi" value="3.14159"/>
<input type="hidden" name="custom_pi" value="3.14159"/>
<input type="hidden" name="custom_pi" value="3.14159"/>

          <input type="hidden" name="custom_pi" value="3.14159"/>
<input type="hidden" name="custom_user_primary_email" value="admin@lumos.org"/>
<input type="hidden" name="custom_discipline" value="DPE001"/>
<input type="hidden" name="custom_discipline" value="BPE001"/>
<input type="hidden" name="coauth_consumer_key" value="acf93780-d2f4-0131-6e78-20c9d07c6451"/>
<input type="hidden" name="coauth_nonce" value="1471584111882"/>
<input type="hidden" name="coauth_signature_method" value="HMAC-SHA1"/>
<input type="hidden" name="coauth_timestamp" value="140242277"/>
<input type="hidden" name="coauth_version" value="140242277"/>
<input type="hidden" name="coauth_callback" value="about:blank"/>
<input type="hidden" name="coauth_signature" value="5DELQScmp4DVm/x0EN3TwF7TCOg="/>
            <a href="/admin/launches" target="_self">Return to Admin</a>
</form>
</div>
```

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<script language="javascript">
    document.ltiLaunchForm.submit();
</script>
2014-06-10 10:44:51 -0700
LtiMessage: Reregister Tool
LaunchUrl: http://localhost:5000/lti2_tp/reregistrations
<div id="ltiLaunchFormSubmitArea">
    <form action="http://localhost:5000/lti2_tp/reregistrations"
name="ltiLaunchForm" id="ltiLaunchForm" method="post"</pre>
         encType="application/x-www-form-urlencoded">
             carper application/x-www-form-urlencoded">

<input type="hidden" name="tc_profile_url" value="http://localhost:4000/lti2_tc/tool_consumer_profiles/d91cf8f0-d2f4-0131-6e78-20c9d07c6451"/

<input type="hidden" name="launch_presentation_return_url" value="http://localhost:4000/admin/tool_actions"/>

<input type="hidden" name="lti_message_type" value="ToolProxyReregistrationRequest"/>

<input type="hidden" name="oauth_consumer_key" value="acf93780-d2f4-0131-6e78-20c9d07c6451"/>

<input type="hidden" name="oauth_nonce" value="2915546831391"/>

<input type="hidden" name="oauth_signature_method" value="HMAC-SHA1"/>

<input type="hidden" name="oauth_timestamp" value="HMAC-SHA1"/>

<input type="hidden" name="oauth_timestamp" value="1402422291"/>

<input type="hidden" name="oauth_timestamp" value="1402422291"/>
              <input type="hidden" name="oauth_version" value="1.0"/>
<input type="hidden" name="oauth_callback" value="about:blank"/>
<input type="hidden" name="oauth_signature" value="FzzJtNlTw9AvhlRMH5vqFGv3MIU="/>
</form>
<script language="javascript">
    document.ltiLaunchForm.submit();
</script>
                                                                                                    2014-06-10 10:44:54 -0700
                                                                                                   LtiService: ReRegister ToolProxy with ToolConsumer POST http://localhost:4000/lti2_tc/tools
                                                                                                    Headers:
                                                                                                    Authorization: OAuth oauth_consumer_key="acf93780-d2f4-0131-6e78-20c9d07c6451", oauth_nonce="7950076576
                                                                                                    Content-Type: application/vnd.ims.lti.v2.toolproxy+json
                                                                                                    Content-Length: 5376
                                                                                                    X-IMS-EndRegistration-ID: da9d0ec0-d2f4-0131-6e5f-20c9d07c6451
                                                                                                    Body:
                                                                                                    {"@context":["http://purl.imsglobal.org/ctx/lti/v2/ToolProxy"],"@type":"ToolProxy","@id":"ToolProxyProp
2014-06-10 10:45:03 -0700
Response: ReRegister ToolProxy with ToolConsumer
Status: 201 Created
Headers:
content-type: text/html; charset=utf-8
content-length: 1
2014-06-10 10:45:44 -0700
LtiMessage: Lti Launch
LaunchUrl: http://localhost:5000/echoes
<div id="ltiLaunchFormSubmitArea">
    <form action="http://localhost:5000/echoes" target="_blank"
  name="ltiLaunchForm" id="ltiLaunchForm" method="post"
  encType="application/x-www-form-urlencoded">
             crype="application/x=www-form-urlencoded">
<input type="hidden" name="lti_version" value="LTI-2p0"/>
<input type="hidden" name="ti_message_type" value="basic-lti-launch-request"/>
<input type="hidden" name="resource_link_id" value="329"/>
<input type="hidden" name="user_id" value="2"/>
<input type="hidden" name="roles" value="Administrator"/>
              <input type= "hidden" name="launch_presentation_return_url" value="http://localhost:4000/admin/course_page?method=show&course_id=5"/>
<input type="hidden" name="launch_presentation_return_url" value="window"/>
             <input type="hidden" name="context_id" value="5"/>
<input type="hidden" name="context_id" value="5"/>
<input type="hidden" name="context_id" value="5"/>
<input type="hidden" name="context_label" value="DEB001"/>
<input type="hidden" name="context_title" value="DEBign of Personal Environments 1"/>
<input type="hidden" name="tool_consumer_info_product_family_code" value="LuMoS"/>
<input type="hidden" name="tool_consumer_info_version" value="3.1"/>

             <input type="hidden" name="custom_referrer" value="Narcissus"/>
<input type="hidden" name="custom_pi" value="3.14159"/>
<input type="hidden" name="custom_pi" value="3.14159"/>
<input type="hidden" name="custom_user_primary_email" value="admin@lumos.org"/>
<input type="hidden" name="custom_discipline" value="DPE001"/>
<input type="hidden" name="custom_discipline" value="acf93780-d2f4-0131-6e78-20c9d07c6451"/>
<input type="hidden" name="custom_discipline" value="acf93780-d2f4-0131-6e78-20c9d07c6451"/>

              <input type="hidden" name="oauth_nonce" value="9808082784025"/>
<input type="hidden" name="oauth_signature_method" value="HMAC-SHA1"/>
              <input type="hidden" name="oauth_timestamp" value="1402422344"/>
<input type="hidden" name="oauth_version" value="1.0"/>
<input type="hidden" name="oauth_callback" value="about|blank"/>
input type="hidden" name="oauth_callback" value="about|blank"/>
              <input type="hidden" name="oauth_signature" value="0XMf/u76D0eyeCpNhUmsaGa852o="/>
              <a href="/admin/launches" target="_self">Return to Admin</a>
</form>
```

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</div>
<script language="iavascript">
   document.ltiLaunchForm.submit();
2014-06-10 10:46:12 -0700
LtiService: EndRegistration ToolProxy
POST http://localhost:5100/lti2_tp/end_registration
Headers:
Authorization: OAuth oauth consumer key="acf93780-d2f4-0131-6e78-20c9d07c6451", oauth nonce="5745439386174", oauth signature method="HMAC-SHA1", oa
Content-Type: application/vnd.ims.lti.v2.toolproxy+json
Content-Length: 236
X-IMS-EndRegistration-ID: da9d0ec0-d2f4-0131-6e5f-20c9d07c6451
Body:
{"@context":"http://purl.imsglobal.org/ctx/lti/v2/ToolProxyId","@type":"ToolProxy","@id":"http://localhost:4000/tools/acf93780-d2f4-0131-6e78-20c9c
                                                                                        2014-06-10 10:46:12 -0700
                                                                                        Response: EndRegistration ToolProxy
                                                                                        Status: 201 Created
                                                                                        content-type: application/vnd.ims.lti.v2.toolproxy.id+json; charset=utf-8
                                                                                            "@context": "http://purl.imsglobal.org/ctx/lti/v2/ToolProxyId",
                                                                                             "@type": "ToolProxy",
                                                                                             "@id": "http://localhost:4000/tools/acf93780-d2f4-0131-6e78-20c9d07c6451",
                                                                                             "tool_proxy_guid": "acf93780-d2f4-0131-6e78-20c9d07c6451",
                                                                                             "disposition": "commit"
2014-06-10 10:46:29 -0700
LtiMessage: Lti Launch
LaunchUrl: http://localhost:5000/echoes
<div id="ltiLaunchFormSubmitArea">
    <form action="http://localhost:5000/echoes" target="_blank"</pre>
       name="ltiLaunchForm" id="ltiLaunchForm" method="post"
       encType="application/x-www-form-urlencoded">
           <input type="hidden" name="lti_version" value="LTI-2p0"/>
<input type="hidden" name="lti_message_type" value="basic-lti-launch-request"/>
<input type="hidden" name="resource_link_id" value="329"/>
<input type="hidden" name="user_id" value="2"/>
            input type="hidden" name="roles" value="Administrator"/>
<input type="hidden" name="launch_presentation_return_url" value="http://localhost:4000/admin/course_page?method=show&course_id=5"/>
<input type="hidden" name="launch_presentation_document_target" value="window"/>
            <input type="hidden" name="context_id" value="5"/>
<input type="hidden" name="context_id" value="5"/>
<input type="hidden" name="launch_presentation_locale" value="en_US"/>
            input type="hidden" name="context label" value="DPE001"/>
<input type="hidden" name="context_title" value="Design of Personal Environments 1"/>
            <input type="hidden" name="lis_course_section_sourcedid" value="5"/>
<input type="hidden" name="tool_consumer_info_product_family_code" value="LuMoS"/>
<input type="hidden" name="tool_consumer_info_version" value="3.1"/>
            <input type="hidden" name="custom referrer" value="Narcissus"/>
            <input type="hidden" name="custom_pi" value="3.14159"/>
           cinput type="hidden" name="custom_user_primary_email" value="admin@lumos.org"/>
cinput type="hidden" name="custom_discipline" value="DPE001"/>
cinput type="hidden" name="oauth_consumer_key" value="acf93780-d2f4-0131-6e78-20c9d07c6451"/>
cinput type="hidden" name="oauth_nonce" value="5810741396457"/>
cinput type="hidden" name="oauth_signature_method" value="HMAC-SHA1"/>
cinput type="hidden" name="oauth_signature_method" value="IMAC-SHA1"/>
cinput type="hidden" name="oauth_signature_method."
            <input type="hidden" name="oauth_timestamp" value="1402422389"/>
            <input type="hidden" name="oauth_version" value="1.0"/>
            <input type="hidden" name="oauth_callback" value="about:blank"/>
<input type="hidden" name="oauth_signature" value="sPuVUeJtG70C9QXBFdAkwkAZbnc="/>
            <a href="/admin/launches" target=" self">Return to Admin</a>
</form>
</div>
<script language="javascript">
   document.ltiLaunchForm.submit();
</script>
2014-06-10 10:46:46 -0700
LtiMessage: Reregister Tool
LaunchUrl: http://localhost:5000/lti2_tp/reregistrations
<div id="ltiLaunchFormSubmitArea">
   form action="http://localhost:5000/lti2_tp/reregistrations"
    name="ltiLaunchForm" id="ltiLaunchForm" method="post"
       encType="application/x-www-form-urlencoded">
            <input type="hidden" name="tc_profile_url" value="http://localhost:4000/lti2_tc/tool_consumer_profiles/1d9a8090-d2f5-0131-6e78-20c9d07c6451"/</pre>
           <input type="hidden" name="launch_presentation_return_url" value="http://localhost:4000/admin/tool_actions"/>
<input type="hidden" name="lti_message_type" value="ToolProxyReregistrationRequest"/>
<input type="hidden" name="oauth_consumer_key" value="acf93780-d2f4-0131-6e78-20c9d07c6451"/>
<input type="hidden" name="oauth_nonce" value="2099230084750"/>
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<input type="hidden" name="oauth_signature_method" value="HMAC-SHA1"/>
          <input type="hidden" name="oauth_timestamp" value="1402422406"/>
<input type="hidden" name="oauth_version" value="1.0"/>
          <input type="hidden" name="oauth_callback" value="about:blank"/>
          <input type="hidden" name="oauth_signature" value="FulobhL9sR0BKPU9Ug/J7VBnIF8="/>
</form>
</div>
<script language="javascript">
   document.ltiLaunchForm.submit();
</script>
                                                                             2014-06-10 10:46:48 -0700
                                                                             LtiService: ReRegister ToolProxy with ToolConsumer
                                                                             POST http://localhost:4000/lti2_tc/tools
                                                                             Headers:
                                                                             Authorization: OAuth oauth consumer key="acf93780-d2f4-0131-6e78-20c9d07c6451", oauth nonce="5764528042
                                                                             Content-Type: application/vnd.ims.lti.v2.toolproxy+json
                                                                             Content-Length: 5376
                                                                             X-IMS-EndRegistration-ID: 1eb2ec30-d2f5-0131-6e5f-20c9d07c6451
                                                                             Body:
                                                                             {"@context":["http://purl.imsglobal.org/ctx/lti/v2/ToolProxy"],"@type":"ToolProxy","@id":"ToolProxyProp
2014-06-10 10:46:58 -0700
Response: ReRegister ToolProxy with ToolConsumer
Status: 201 Created
content-type: text/html; charset=utf-8
content-length: 1
2014-06-10 10:47:04 -0700
LtiMessage: Reregister Tool
LaunchUrl: http://localhost:5000/lti2_tp/reregistrations
<div id="ltiLaunchFormSubmitArea">
   <form action="http://localhost:5000/lti2_tp/reregistrations"</pre>
       name="ltiLaunchForm" id="ltiLaunchForm" method="post"
       encType="application/x-www-form-urlencoded">
          <input type="hidden" name="tc_profile_url" value="http://localhost:4000/lti2_tc/tool_consumer_profiles/281fd010-d2f5-0131-6e78-20c9d07c6451"/</pre>
          <input type="hidden" name="launch_presentation_return_url" value="http://localhost:4000/admin/tool_actions"/>
          <input type="hidden" name="lti_message_type" value="ToolProxyReregistrationRequest"/>
          <input type="hidden" name="oauth_consumer_key" value="acf93780-d2f4-0131-6e78-20c9d07c6451"/>
<input type="hidden" name="oauth_nonce" value="1612801540886"/>
<input type="hidden" name="oauth_signature_method" value="HMAC-SHA1"/>
<input type="hidden" name="oauth_timestamp" value="1402422424"/>
<input type="hidden" name="oauth_version" value="1.0"/>
          <input type="hidden" name="oauth_callback" value="about:blank"/>
          <input type="hidden" name="oauth_signature" value="hNViVTdVWGYQS4dL8E76rJRrQUg="/>
</form>
</div>
<script language="javascript">
   document.ltiLaunchForm.submit();
</script>
                                                                             2014-06-10 10:47:05 -0700
                                                                             LtiService: ReRegister ToolProxy with ToolConsumer
                                                                             POST http://localhost:4000/lti2_tc/tools
                                                                             Headers:
                                                                             Authorization: OAuth oauth consumer key="acf93780-d2f4-0131-6e78-20c9d07c6451", oauth nonce="9102772935
                                                                             Content-Type: application/vnd.ims.lti.v2.toolproxy+json
                                                                             Content-Length: 5376
                                                                             X-IMS-EndRegistration-ID: 292ef240-d2f5-0131-6e5f-20c9d07c6451
                                                                             Body:
                                                                             {"@context":["http://purl.imsglobal.org/ctx/lti/v2/ToolProxy"],"@type":"ToolProxy","@id":"ToolProxyProp
2014-06-10 10:47:15 -0700
Response: ReRegister ToolProxy with ToolConsumer
Status: 201 Created
Headers:
content-type: text/html; charset=utf-8
content-length: 1
2014-06-10 10:47:19 -0700
LtiService: EndRegistration ToolProxy
POST http://localhost:5100/lti2_tp/end_registration
Authorization: OAuth oauth_consumer_key="acf93780-d2f4-0131-6e78-20c9d07c6451", oauth_nonce="7796795763246", oauth_signature_method="HMAC-SHA1", oauth_signature_method="HMAC-SHA1", oauth_signature_method="MAC-SHA1", oauth
Content-Type: application/vnd.ims.lti.v2.toolproxy+json
```

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Content-Length: 236
X-IMS-EndRegistration-ID: 292ef240-d2f5-0131-6e5f-20c9d07c6451
{"@context":"http://purl.imsglobal.org/ctx/lti/v2/ToolProxyId","@type":"ToolProxy","@id":"http://localhost:4000/tools/acf93780-d2f4-0131-6e78-20c9c
                                                                                       2014-06-10 10:47:19 -0700
                                                                                        Response: EndRegistration ToolProxy
                                                                                        Status: 201 Created
                                                                                        Headers:
                                                                                        content-type: application/vnd.ims.lti.v2.toolproxy.id+json; charset=utf-8
                                                                                        content-length: 236
                                                                                           "@context": "http://purl.imsglobal.org/ctx/lti/v2/ToolProxyId",
"@type": "ToolProxy",
"@id": "http://localhost:4000/tools/acf93780-d2f4-0131-6e78-20c9d07c6451",
"tool_proxy_guid": "acf93780-d2f4-0131-6e78-20c9d07c6451",
                                                                                            "disposition": "commit"
2014-06-10 10:47:31 -0700
LtiMessage: Lti Launch
LaunchUrl: http://localhost:5000/echoes
<div id="ltiLaunchFormSubmitArea">
  <form action="http://localhost:5000/echoes" target=" blank"</pre>
       name="ltiLaunchForm" id="ltiLaunchForm" method="post' encType="application/x-www-form-urlencoded">
           "Arype= application/x=www=loim=ullencoded">
<input type="hidden" name="lti_version" value="LTI-2p0"/>
<input type="hidden" name="tei_message_type" value="basic-lti-launch-request"/>
<input type="hidden" name="resource_link_id" value="329"/>
<input type="hidden" name="user_id" value="2"/>
<input type="hidden" name="roles" value="Administrator"/>
            cinput type="hidden" name="launch_presentation_return_ur1" value="http://localhost:4000/admin/course_page?method=show&course_id=5"/>
<input type="hidden" name="launch_presentation_document_target" value="window"/>
           <input type="hidden" name="context_id" value="5"/>
<input type="hidden" name="context_id" value="5"/>
<input type="hidden" name="launch_presentation_locale" value="en_US"/>
<input type="hidden" name="context_label" value="DPE001"/>
<input type="hidden" name="context_title" value="Design of Personal Environments 1"/>
<input type="hidden" name="context_title" value="Design of Personal Environments 1"/>
<input type="hidden" name="lis_course_section_sourcedid" value="5"/>

            <input type="hidden" name="tool_consumer_info_product_family_code" value="LuMoS"/>
<input type="hidden" name="tool_consumer_info_version" value="3.1"/>
           <input type="hidden" name="custom_referrer" value="Narcissus"/>
<input type="hidden" name="custom_pi" value="3.14159"/>
<input type="hidden" name="custom_user_primary_email" value="admin@lumos.org"/>
<input type="hidden" name="custom_discipline" value="DPE001"/>
<input type="hidden" name="custom_discipline" value="DPE001"/>
<input type="hidden" name="custom_discipline" value="acf93780-d2f4-0131-6e78-20c9d07c6451"/>
            input type="hidden" name="oauth_nonce" value="9324388362256"/>
input type="hidden" name="oauth_signature_method" value="HMAC-SHA1"/>
input type="hidden" name="oauth_timestamp" value="1402422451"/>
           <input type="indden" name="oauth_callback" value="1.0"/>
<input type="hidden" name="oauth_callback" value="about:blank"/>
            <input type="hidden" name="oauth signature" value="F/4ycEJa6Cf++jHgBJnsostftNg="/>
            <a href="/admin/launches" target=" self">Return to Admin</a>
</form>
</div>
<script language="javascript">
    document.ltiLaunchForm.submit();
</script>
```