

## ONLINE APPENDIX

### Example license: For 100 concurrent MATLAB instances

```

<PolicySet xmlns="xacml:2.0:policy:nccu"
  PolicyCombiningAlgId="permit-overrides">
  <Target>
    <SubjectMatch MatchId="FUNCTION:STRING-EQUAL">
      <SubjectAttributeDesignator
        DataType="#string"
        AttributeId="ORG-ID" />
      <AttributeValue
        DataType="#string">NCCU</AttributeValue>
    </SubjectMatch>
  </Target>

  <Policy xmlns="xacml:2.0:policy"
    PolicyId="concurrent-matlab-instances"
    RuleCombiningAlgId="ordered-permit-overrides">
    <Description>
      "NCCU" License for 100 concurrent MATLAB instances
    </Description>
    <Target>
      <ResourceMatch MatchId="FUNCTION:STRING-EQUAL">
        <ResourceAttributeDesignator
          AttributeId="IMAGE:NAME"
          DataType="#string" />
        <AttributeValue DataType="#string">
          MATLAB
        </AttributeValue>
      </ResourceMatch>
    </Target>

    <Rule Effect="Permit" RuleId="CommitRule">
      <Target>
        <ActionMatch MatchId="FUNCTION:STRING-EQUAL">
          <AttributeValue DataType="#string">
            EXECUTE
          </AttributeValue>
          <ActionAttributeDesignator AttributeId="ACTION-ID"
            DataType="XMLSchema#string" />
        </ActionMatch>
      </Target>
      <Condition FunctionId="FUNCTION:AND">
        <Apply FunctionId="INTEGER-LESS-THAN-OR-EQUAL">
          <SubjectAttributeDesignator
            AttributeId="MATLAB-LICENSE@CONCURRENT:INSTANCES"
            DataType="XMLSchema#integer" />
          <AttributeValue DataType="#integer">
            100
          </AttributeValue>
        </Apply>
      </Condition>
    </Rule>
    <Rule Effect="Deny" RuleId="DenyOtherwise"/>

    <Obligation
      ObligationId="COUNT_LICENSE"
      FulfillOn="Permit">
      <AttributeAssignment AttributeId="LICENSE_ID"
        DataType="#string">
        MATLAB-LICENSE
      </AttributeAssignment>
    </Obligation>
  </Policy>
</PolicySet>

```