# InsertSheets samples

## Insert sheets before/after printed sheets

The following JDF defines that two insert sheets must be inserted. It should be read as follows: it specifies insert sheets (58TSheetType="InsertSheet"58T) that must be inserted before (58TSheetUsage="Header"58T) the **RunList** partition to which it belongs, so in this case: before page 21 (Pages="20") and after page 41.

<JDF Type="Combined" Types="... DigitalPrinting ..." ... >

 <ResourcePool>

 <RunList PartIDKeys="Run" ID="NodeIDRunList" Class="Parameter"

 Status="Available" ...>

 ...

 </RunList>

 <LayoutPreparationParams PartIDKeys="RunIndex" ID="NodeIDRunList"

 Class="Parameter" Status="Available" ...>

 <LayoutPreparationParams RunIndex="0 ~ 19" >

 ...

 </LayoutPreparationParams>

 <!-- Insert before page 21 -->

 <LayoutPreparationParams RunIndex="20 ~ 31" >

 <InsertSheet SheetFormat="Blank" SheetType="InsertSheet"

 SheetUsage="Header">

 <Layout>

 <MediaRef rRef="MediaId1" />

 </Layout>

 </InsertSheet>

 </LayoutPreparationParams>

 <!-- Insert after page 41 -->

 <LayoutPreparationParams RunIndex="32 ~ 40" >

 <InsertSheet SheetFormat="Blank" SheetType="InsertSheet"

 SheetUsage="Trailer">

 <Layout>

 <MediaRef rRef="MediaId1" />

 </Layout>

 </InsertSheet>

 </LayoutPreparationParams>

 <LayoutPreparationParams RunIndex="41 ~ -1" >

 ...

 </LayoutPreparationParams>

 </LayoutPreparationParams>

 <Media ID="MediaId1" ... />

 ...

 </ResourcePool>

 <ResourceLinkPool>

 <RunListLink Usage="Input" rRef="NodeIDRunList" />

 ...

 </ResourceLinkPool>

</JDF>

## Insert sheets before/after printed sheets, including finishing

The following JDF defines that two insert sheets must be inserted. Each part is separated stapled and is stacked with offset. The inserted sheets are stapled with their referenced part.

<JDF Type="Combined" Types="... DigitalPrinting ..." ... >

 <ResourcePool>

 <RunList PartIDKeys="Run" ID="NodeIDRunList" Class="Parameter"

 Status="Available" ...>

 ...

 </RunList>

 <LayoutPreparationParams PartIDKeys="RunIndex" ID="NodeIDRunList"

 Class="Parameter" Status="Available" ...>

 <LayoutPreparationParams RunIndex="0 ~ 19" >

 ...

 </LayoutPreparationParams>

 <!-- Insert before page 21 -->

 <LayoutPreparationParams RunIndex="20 ~ 31" >

 <InsertSheet SheetFormat="Blank" SheetType="InsertSheet"

 SheetUsage="Header">

 <Layout>

 <MediaRef rRef="MediaId1" />

 </Layout>

 </InsertSheet>

 </LayoutPreparationParams>

 <!-- Insert after page 41 -->

 <LayoutPreparationParams RunIndex="32 ~ 40" >

 <InsertSheet SheetFormat="Blank" SheetType="InsertSheet"

 SheetUsage="Trailer">

 <Layout>

 <MediaRef rRef="MediaId1" />

 </Layout>

 </InsertSheet>

 </LayoutPreparationParams>

 <LayoutPreparationParams RunIndex="41 ~ -1" >

 ...

 </LayoutPreparationParams>

 </LayoutPreparationParams>

 <Media ID="MediaId1" ... />

 <DigitalPrintingParams ID="NodeIDDPP" Class="Parameter"

 Status="Available" ... />

 <StitchingParams ID="NodeIDStitch" Class="Parameter" Status="Available"

 PartIDKeys="RunIndex" ...>

 <StitchingParams RunIndex="0 ~ 19" .../>

 <!-- The first insert sheet is stapled with pages 21-32 -->

 <StitchingParams RunIndex="20 ~ 31" .../>

 <!-- The second insert sheet is stapled with pages 31-41 -->

 <StitchingParams RunIndex="32 ~ 40" .../>

 <StitchingParams RunIndex="41 ~ -1" .../>

 </StitchingParams>

 <GatheringParams ID="NodeIDGath" Class="Parameter" Status="Available"

 PartIDKeys="RunIndex" ...>

 <Disjointing OffsetDirection="Alternate" />

 <GatheringParams RunIndex="0 ~ 1" />

 <GatheringParams RunIndex="20 ~ 31" />

 <GatheringParams RunIndex="32 ~ 40" />

 <GatheringParams RunIndex="41 ~ -1" />

 </GatheringParams>

 ...

 </ResourcePool>

 <ResourceLinkPool>

 <RunListLink Usage="Input" rRef="NodeIDRunList" />

 <DigitalPrintingParamsLink rRef="NodeIDDPP" Usage="Input" />

 <StitchingParamsLink rRef="NodeIDStitch" Usage="Input" />

 <GatheringParamsLink rRef=" NodeIDGath" Usage="Input" />

 ...

 </ResourceLinkPool>

</JDF>

## Insert sheets separately finished (🡺 bundle)

The following JDF defines that 3 insert sheets must be inserted and separately stapled and stacked.

<JDF Type="Combined" Types="... DigitalPrinting ..." ... >

 <ResourcePool>

 <RunList PartIDKeys="Run" ID="NodeIDRunList" Class="Parameter"

 Status="Available" ...>

 ...

 </RunList>

 <LayoutPreparationParams PartIDKeys="RunIndex" ID="NodeIDRunList"

 Class="Parameter" Status="Available" ...>

 <LayoutPreparationParams RunIndex="0 ~ 19" >

 ...

 </LayoutPreparationParams>

 <!-- 3 sheets inserted before page 21 -->

 <LayoutPreparationParams RunIndex="20 ~ 31" >

 <InsertSheet SheetFormat="Blank" SheetType="InsertSheet"

 IncludeInBundleItem="New" SheetUsage="Header">

 <Layout>

 <MediaRef rRef="MediaId1" />

 </Layout>

 </InsertSheet>

 <InsertSheet SheetFormat="Blank" SheetType="InsertSheet"

 IncludeInBundleItem="Before" SheetUsage="Header">

 <Layout>

 <MediaRef rRef="MediaId1" />

 </Layout>

 </InsertSheet>

 <InsertSheet SheetFormat="Blank" SheetType="InsertSheet"

 IncludeInBundleItem="Before" SheetUsage="Header">

 <Layout>

 <MediaRef rRef="MediaId1" />

 </Layout>

 </InsertSheet>

 </LayoutPreparationParams>

 <LayoutPreparationParams RunIndex="32 ~ 40" >

 ...

 </LayoutPreparationParams>

 <LayoutPreparationParams RunIndex="41 ~ -1" >

 ...

 </LayoutPreparationParams>

 </LayoutPreparationParams>

 <Media ID="MediaId1" ... />

 <DigitalPrintingParams ID="NodeIDDPP" Class="Parameter"

 Status="Available" ... />

 <StitchingParams ID="NodeIDStitch" Class="Parameter" Status="Available"

 PartIDKeys="BundleItemIndex RunIndex" ...>

 <StitchingParams BundleItemIndex="0" .../>

 <StitchingParams BundleItemIndex="1" .../>

 <StitchingParams BundleItemIndex="2" ...>

 <StitchingParams RunIndex="32 ~ 40" .../>

 <StitchingParams RunIndex="41 ~ -1" .../>

 </StitchingParams>

 </StitchingParams>

 <GatheringParams ID="NodeIDGath" Class="Parameter" Status="Available"

 PartIDKeys="BundleItemIndex RunIndex" ...>

 <Disjointing OffsetDirection="Alternate" />

 <GatheringParams BundleItemIndex="0" />

 <GatheringParams BundleItemIndex="1" />

 <GatheringParams BundleItemIndex="2" ...>

 <GatheringParams RunIndex="32 ~ 40" .../>

 <GatheringParams RunIndex="41 ~ -1" .../>

 </GatheringParams>

 </GatheringParams>

 ...

 </ResourcePool>

 <ResourceLinkPool>

 <RunListLink Usage="Input" rRef="NodeIDRunList" />

 <DigitalPrintingParamsLink rRef="NodeIDDPP" Usage="Input" />

 <StitchingParamsLink rRef="NodeIDStitch" Usage="Input" />

 <GatheringParamsLink rRef=" NodeIDGath" Usage="Input" />

 ...

 </ResourceLinkPool>

</JDF>

## Insert sheets as banner job (one printed before all sets)

The following JDF defines that a banner page base on the model "MyBanner" must be used.

<JDF Type="Combined" Types="... DigitalPrinting ..." ... >

 <ResourcePool>

 <RunList ID="NodeIDRunList" Class="Parameter" Status="Available" ... >

 </RunList>

 <LayoutPreparationParams PartIDKeys="RunIndex" ID="NodeIDRunList"

 Class="Parameter" Status="Available" ...>

 <InsertSheet SheetType="JobSheet" IsWaste="true" SheetUsage="Trailer"

 SheetFormat="Standard" >

 <-- This specifies the device template to be used -->

 <Layout Name="MyBanner">

 <MediaRef rRef="MediaId1" />

 </Layout>

 </InsertSheet>

 ...

 </LayoutPreparationParams>

 <Media ID="MediaId1" ... />

 ...

 </ResourcePool>

 <ResourceLinkPool>

 <RunListLink Usage="Input" rRef="NodeIDRunList" />

 ...

 </ResourceLinkPool>

</JDF>

## Insert sheets as banner job with operator instructions

The following JDF defines that a banner page base on the model "MyBanner" must be used. It includes the text "Instruction for operator".

<JDF Type="Combined" Types="... DigitalPrinting ..." ... >

 <ResourcePool>

 <RunList ID="NodeIDRunList" Class="Parameter" Status="Available" ... >

 </RunList>

 <LayoutPreparationParams PartIDKeys="RunIndex" ID="NodeIDRunList"

 Class="Parameter" Status="Available" ...>

 <InsertSheet SheetType="JobSheet" IsWaste="true" SheetUsage="Trailer"

 SheetFormat="Standard" >

 <!-- This specifies the device template to be used -->

 <Layout Name="MyBanner">

 <MarkObject CTM="1 0 0 1 0 0" >

 <!-- This specifies the operator text for the template

 The attribute ShowList is useless but mandatory... -->

 <JobField OperatorText="Instruction for operator"

 ShowList="OperatorText" />

 ...

 </MarkObject>

 <MediaRef rRef="MediaId1" />

 </Layout>

 </InsertSheet>

 </LayoutPreparationParams>

 <Media ID="MediaId1" ... />

 ...

 </ResourcePool>

 <ResourceLinkPool>

 <RunListLink Usage="Input" rRef="NodeIDRunList" />

 ...

 </ResourceLinkPool>

</JDF>

## Insert sheets between each printed sheets (interleaved)

The following JDF defines that a separator sheet must be inserted after every sheet. The separator sheets must remain in the document:

<JDF Type="Combined" Types="... DigitalPrinting ..." ... >

 <ResourcePool>

 <RunList ID="NodeIDRunList" Class="Parameter" Status="Available" ... >

 <Media ID="MediaId1" ... />

 ...

 <DigitalPrintingParams ID="NodeIDDPP" Class="Parameter"

 Status="Available" ...>

 <Disjointing OffsetDirection="None" />

 <InsertSheet SheetFormat="Blank" SheetType="SeparatorSheet"

 SheetUsage="Interleaved">

 <Layout>

 <MediaRef rRef="MediaId1" />

 </Layout>

 </InsertSheet>

 </Disjointing>

 ...

 </DigitalPrintingParams>

 ...

 </ResourcePool>

 <ResourceLinkPool>

 <DigitalPrintingParamsLink rRef="NodeIDDPP" Usage="Input" />

 <RunListLink Usage="Input" rRef="NodeIDRunList" />

 ...

 </ResourceLinkPool>

</JDF>

## Insert sheets between each copy set

The following JDF defines that a separator sheet must be inserted before every copy of the document.
The result will be: Separator Sheet + Copy 1 + Separator Sheet + Copy 2 + Separator Sheet + Copy 3.
The separator sheets must be discarded (58TIsWaste="true"58T).

<JDF Type="Combined" Types="... DigitalPrinting ..." ... >

 <ResourcePool>

 <RunList ID="NodeIDRunList" Class="Parameter" Status="Available" ... >

 </RunList>

 <Media ID="MediaId1" ... />

 <DigitalPrintingParams ... >

 <!-- Every copy is jogged in the output bin -->

 <Disjointing OffsetDirection="Alternate" />

 <-- A banner page must be printed after the job -->

 <InsertSheet SheetFormat="Blank" SheetType="SeparatorSheet"

 SheetUsage="Header" IsWaste="true" >

 <-- Template for banner page -->

 <Layout Name="MySeparatorTemplate">

 <MediaRef rRef="MediaId1" />

 </Layout>

 </InsertSheet>

 </Disjointing>

 </DigitalPrintingParams>

 <Component ID="NodeIDComponent" Class="Quantity"

 Status="Unavailable" ... />

 ...

 </ResourcePool>

 ...

 <ResourceLinkPool>

 <RunListLink Usage="Input" rRef="NodeIDRunList" />

 <DigitalPrintingParamsLink rRef="NodeIDDPP" Usage="Input" />

 ...

 </ResourceLinkPool>

</JDF>

## Force front/back pages

The following JDF fragment shows that page 5 must be on the front.

<JDF Type="Combined" Types="... DigitalPrinting ..." ...>

 <ResourcePool>

 <RunList Class="Parameter" ID="id"

 PartIdKeys="Run" Status="Avalable">

 <RunList Run="Chapter1" Pages="0 ~ 3">

 ...

 </RunList>

 <!-- Page with index 4 in the fifth of the document -->

 <RunList Run="Chapter2" Pages="4 ~ 10">

 <InsertSheet IsWaste="false" SheetFormat="Blank"

 SheetType="FillSheet" SheetUsage="FillForceFront" />

 </RunList>

 <RunList Run="Chapter3" Pages="11 ~ 25">

 ...

 </RunList>

 ...

 </RunList>

 ...

 </ResourcePool>

 ...

</JDF>

The following JDF fragment shows that pages 5, 10 and 27 must be on the front side.

<JDF Type="Combined" Types="... DigitalPrinting ..." ...>

 <ResourcePool>

 <RunList Class="Parameter" ID="id" PartIdKeys="Run" Status="Available">

 <!-- Some pages must be forced to front side -->

 <RunList Run="Chapter2" Pages="4 9 26">

 <InsertSheet IsWaste="false" SheetFormat="Blank"

 SheetType="FillSheet" SheetUsage="FillForceFront" />

 </RunList>

 ...

 </RunList>

 ...

 </ResourcePool>

 ...

</JDF>