### Shared [Workbook](Workbook.docx) Data

Within a shared [workbook](workbook.docx), the changes made to the spreadsheet at runtime are persisted as [sets](sets.docx) of different [revisions](revisions.docx) collectively forming a revision history. These are persisted to the file on disk during a save event, and are saved in different xml parts known as revision logs. There is a [headers](headers.docx) [table](table.docx) xml part that summarizes when changes were made, who made them, and it lists the relationship from each [header](header.docx) to the individual revision log that records the specific changes.

[Example: This example shows the [header](header.docx) and revision log for two simple events: adding text to a [cell](cell.docx), and inserting a new sheet.

First, take a look at the [header](header.docx) [table](table.docx), and revision log:

<[headers](headers.docx) xmlns="…" xmlns:r="…" guid="{A84A6777-8908-4CB9-9EB6-625CEFF419D3}">
 <[header](header.docx) guid="{A84A6777-8908-4CB9-9EB6-625CEFF419D3}"
 dateTime="2006-07-14T13:42:54" maxSheetId="4" userName="UserName"
 r:id="rId1">

 <[sheetIdMap](sheetIdMap.docx) count="3">
 <[sheetId](sheetId.docx) [val](val.docx)="1"/>
 <[sheetId](sheetId.docx) [val](val.docx)="2"/>
 <[sheetId](sheetId.docx) [val](val.docx)="3"/>
 </[sheetIdMap](sheetIdMap.docx)>
 </[header](header.docx)>

</[headers](headers.docx)>

And the revision log is essentially empty:

<[revisions](revisions.docx) xmlns="…" xmlns:r="…"/>

Now, after inserting the text "foo" into [cell](cell.docx) A1, and saving, the [header](header.docx) looks like this:

<[headers](headers.docx) xmlns="…" xmlns:r="…" guid="{CFEA9B63-728B-4274-A346-0440E1573AB4}"
 diskRevisions="1" revisionId="1" version="2">

 <[header](header.docx) guid="{A84A6777-8908-4CB9-9EB6-625CEFF419D3}"
 dateTime="2006-07-14T13:42:54" maxSheetId="4" userName="UserName"
 r:id="rId1">

 <[sheetIdMap](sheetIdMap.docx) count="3">
 <[sheetId](sheetId.docx) [val](val.docx)="1"/>
 <[sheetId](sheetId.docx) [val](val.docx)="2"/>
 <[sheetId](sheetId.docx) [val](val.docx)="3"/>
 </[sheetIdMap](sheetIdMap.docx)>
 </[header](header.docx)>

 <[header](header.docx) guid="{CFEA9B63-728B-4274-A346-0440E1573AB4}"
 dateTime="2006-07-14T13:44:40" maxSheetId="4" userName="UserName"
 r:id="rId2" minRId="1">

 <[sheetIdMap](sheetIdMap.docx) count="3">
 <[sheetId](sheetId.docx) [val](val.docx)="1"/>
 <[sheetId](sheetId.docx) [val](val.docx)="2"/>
 <[sheetId](sheetId.docx) [val](val.docx)="3"/>
 </[sheetIdMap](sheetIdMap.docx)>
 </[header](header.docx)>

</[headers](headers.docx)>

A new [header](header.docx) entry is added, with a GUID and a revision ID (rId2) that specifies which log to look into to see the details about the revision.

The old log is saved, and the newly created log (corresponding to rId2) now looks like this:

<[revisions](revisions.docx) xmlns="…" xmlns:r="…">
 <[rcc](rcc.docx) rId="1" sId="1">
 <[nc](nc.docx) [r](r.docx)="A1" [t](t.docx)="inlineStr">
 <is>
 <[t](t.docx)>foo</[t](t.docx)>
 <[phoneticPr](phoneticPr.docx) fontId="0"/>
 </is>
 </[nc](nc.docx)>
 </[rcc](rcc.docx)>
</[revisions](revisions.docx)>

The log shows that the contents of a [cell](cell.docx) were revised, and the new [cell](cell.docx) contents is text containg "foo" as the string.

After inserting a new [sheet](sheet.docx), the [header](header.docx) looks like this:

<[headers](headers.docx) xmlns="…" xmlns:r="…" guid="{7E1DAFA8-EF95-4865-8FE8-CC17B28635CF}"
 diskRevisions="1" revisionId="2" version="3">

 <[header](header.docx) guid="{A84A6777-8908-4CB9-9EB6-625CEFF419D3}"
 dateTime="2006-07-14T13:42:54" maxSheetId="4"
 userName="UserName" r:id="rId1">

 <[sheetIdMap](sheetIdMap.docx) count="3">
 <[sheetId](sheetId.docx) [val](val.docx)="1"/>
 <[sheetId](sheetId.docx) [val](val.docx)="2"/>
 <[sheetId](sheetId.docx) [val](val.docx)="3"/>
 </[sheetIdMap](sheetIdMap.docx)>
 </[header](header.docx)>

 <[header](header.docx) guid="{CFEA9B63-728B-4274-A346-0440E1573AB4}"
 dateTime="2006-07-14T13:44:40" maxSheetId="4" userName="UserName"
 r:id="rId2" minRId="1">

 <[sheetIdMap](sheetIdMap.docx) count="3">
 <[sheetId](sheetId.docx) [val](val.docx)="1"/>
 <[sheetId](sheetId.docx) [val](val.docx)="2"/>
 <[sheetId](sheetId.docx) [val](val.docx)="3"/>
 </[sheetIdMap](sheetIdMap.docx)>
 </[header](header.docx)>

 <[header](header.docx) guid="{7E1DAFA8-EF95-4865-8FE8-CC17B28635CF}"
 dateTime="2006-07-14T13:48:56" maxSheetId="5" userName="UserName"
 r:id="rId3" minRId="2">

 <[sheetIdMap](sheetIdMap.docx) count="4">
 <[sheetId](sheetId.docx) [val](val.docx)="1"/>
 <[sheetId](sheetId.docx) [val](val.docx)="2"/>
 <[sheetId](sheetId.docx) [val](val.docx)="3"/>
 <[sheetId](sheetId.docx) [val](val.docx)="4"/>
 </[sheetIdMap](sheetIdMap.docx)>
 </[header](header.docx)>
</[headers](headers.docx)>

You can see that the last, most recent, [header](header.docx) entry shows an entry for the new sheet. The most recent log looks like this:

<[revisions](revisions.docx) xmlns="…" xmlns:r="…">
 <[ris](ris.docx) rId="2" [sheetId](sheetId.docx)="4" name="[shared example.xlsx]Sheet4"
 sheetPosition="3"/>
 <[rcv](rcv.docx) guid="{841DBE00-ECD0-478E-893B-30CE5DABBEF5}" action="delete"/>
 <[rcv](rcv.docx) guid="{841DBE00-ECD0-478E-893B-30CE5DABBEF5}" action="add"/>
</[revisions](revisions.docx)>

This shows the new [sheet](sheet.docx), [sheetId](sheetId.docx) 4, is added to the workbook. The custom view (rcv) for the user is updated as a new [sheet](sheet.docx) was added.

end example]