Arrangements

An arrangement is simply a generic Save Screen Arrangement (SSA) xml file which is, at this point, identical in format and processing to a protocol based SSA.

The only difference is how they get applied. Protocol SSA's are only matching to visits by the protocol we assign based on someone setting up protocols and the visit being assigned that protocol during import. Arrangements do not require protocols. Either the user picks one from a list when opening the visit (see Choose Visit) or MedView itself dynamically picking one at visit open time by looking at the file contents of the visit, also implemented as an option in Choose Visit. The user can also pick one from the Arrangements menu after a visit has been opened in order to present a new multi-window view.

Think of an Arrangement as a template xml file that applies to the whole visit and describes multiple windows rather than just one.
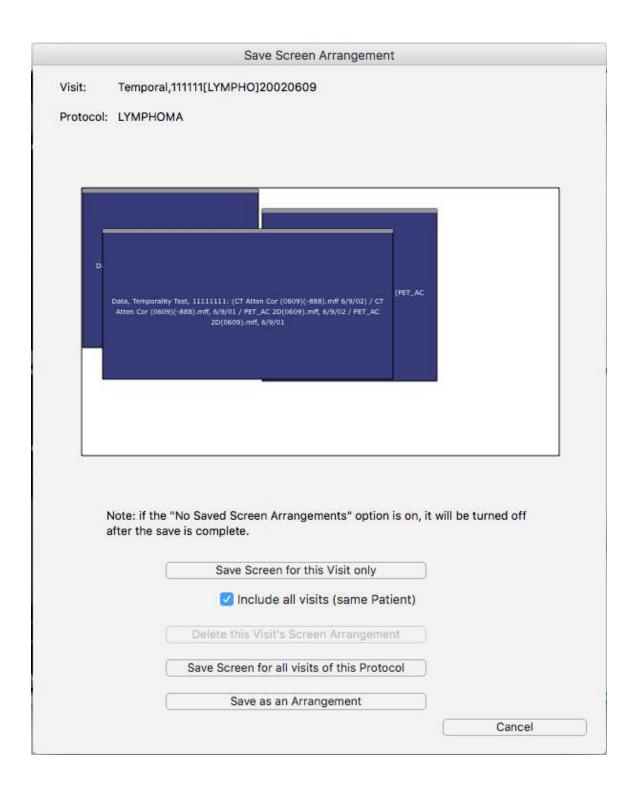
Auto-Arrangement matching works by comparing the list of visit match keywords for a visit/visits with the keywords for Arrangments. Each candidate Arrangements keyword list is matches with those of the visits. At the end of the matching, the Arrangement that has the most keywords in common with that Arrangement wins (best match). So you can view the matching keys for the visit and for the Arrangement possibilities and see which one will best match yourself. Choose Visit has a contextual menu item for the visits in its list that allows you to view the matching keys for a visit.

Arrangements provide a new/better initial visit (without requiring protocols to be set up) visit opening process.

Choose Visit shows available templates and arrangements which are compatible with the currently selected visit. You can manually choose what template or what arrangement you'd like new MedView to use to open the selected visit. This is in and works. An option is provided to allow MedView to pick a most appropriate arrangement from those available. As assumption is that, as with templates, we would provide pre-defined arrangements for standard types of studies (ie cardiac, cardiac stress/rest, CT/PT, CT/MR or whatever). Thus, we could define starting points for more rational out of the box usability of Medview. The assumption is that really, nothing is going to happen by pure magic.

The Save Screen arrangement dialog (save for a protocol) allows you to save a "Save Screen Arrangement" as an "Arrangement". This means that the arrangement goes into the Custom Arrangements folder in MedView(tm)-XP folder and is therefore available in the Arrangements menu and the Arrangements pane in the Choose Visit dialog.

To create an arrangement, open your visits, arrange as desired and perform a "Save Arrangement":

When an Arrangement is created the Save Arrangement dialog:

is displayed and you can give it a name and specify match keys (eg CardiacStressRest?, CT-PET-<somequalifiers>, etc).

You can also at this time check the "Include in Choose Visit auto select arrangement matching" checkbox if you want this arrangment included in the auto-match arrangements to visits opening process.

If you later wish to modify the key match information or rename the Arrangement, you can open the Arrangements Manager dialog:

and double-click (or select and click the Edit button) to see the Edit Arrangement dialog:

Edit Arrangement

Name: twovistempo

Note: for speedier arrangement matching, copy your keys to the name field and prefix them by "--" (two dashes)

☐ Include in Choose Visit auto select arrangement matching

Applicable Study Keys:

☑ Cardiac   ☑ Liver   ☑ PT/CT   ☑ NM
    ☑ Stress   ☑ Whole Body
    ☑ Rest   ☑ Abdomen
    ☑ Gated   ☑ Legs
                     ☑ CTAC
                     ☑ NAC

Other Keys:

visits2

Match keys used for Arrangement matching for the visit used to create this Arrangement:

visits2 rest nac nm –cardiac-PET CT PT-stress-gated-liver-wholebody-whole-body-abdomen-legs-ctac

Arrangement Keys:

visits2 –cardiac-PET CT PT-stress-rest-gated-liver-wholebody-whole-body-abdomen-legs-ctac-nac-nm

Visits:

patientname[PTWB02]20150109
patientname[PTWB02]20131218

Windows:

Format	Data	Bounds
Single – Quadrant Review [2x2]	PT–AC	(t:9, l:8, b:830, r: 940)
Quad –Align(CT/CT/*/*) – Pair-Wise Reg [2x4]	CT–, CT–, PT–AC, PT–AC	(t:77, l:115, b:854, r: 1654)
Single – Quadrant Review [2x2]	PT–AC	(t:115, l:952, b:1004, r: 1884)

Cancel   OK

When you click on a visit (in the Choose Visit dialog, MedView examines each file in the visit and uses that information to populate the Templates and Arrangements panes in Choose Visit. The results of this process is optionally (check box/preference) also used to actually auto-pick the arrangement (magic free protocol mechanism).

In Choose Visit, the Arrangements list has a contextual menu attached to arrangements. Right-click on an Arrangement to edit it or delete it. This can also be done from the Arrangements Manager as above.

Arrangement Usage Notes

Note that only those Arrangements you've specifically checked in the Arrangements Manager will be considered for Arrangement Auto Selection. To do this, create your Arrangement: open a pair of current/prior, set up windows etc, perform "Save Arrangement" (cmd/control S, click Save as An Arrangement), then in the resulting dialog, check the "Include in Choose Visit auto select Arrangement matching" checkbox and click "OK". You can do this after the fact by using the Arrangement Manager to edit the Arrangement.

For multiple visits and multiple visit arrangements, the key visit is the newest of the selected visits. MedView automatically sorts selected visits by Visit Date to ensure repeatability. This is a firm rule as it ensures reliable population of current/prior multi-visit Arrangements. The same result will happen reliably with no dependence on order of image files in the visits (as happens with MedView prior to 12.5 .NET/Cocoa. MedView automatically sorts selected visits by Visit Date to ensure this repeatability.

To open a visit with a specific arrangement. Select the desired visit in Choose Visit. The Arrangements list will populate with those Arrangements that have key items that match the visits (you can see and modify these with the Arrangement Manager). Double click on the desired Arrangement (or select it and click View or Close and View).

To open a visit with an arrangement that best matches the desired visit. Select the Visit in Choose Visit. The Arrangements list will populate with those Arrangements that best match the visit. Make sure that the "Auto select Arrangement" checkbox is checked. You don't need to choose an Arrangement. Just double click the visit or select it and click View or View and Close. Note that if a Visit has an SSA for that specific visit, that SSA will always be used to open the visit unless you delete the SSA or turn off the "Apply SSA" option.

To open two visits with a two visit arrangement. Same as above, basically. Select the two visits and double click the desired Arrangement in the list (or let Arrangement matching pick one for you, providing there is an applicable two visit Arrangement). Note that if the two visit SSA does not match one of the visits in terms of data required and data present in the visit, not all windows may open. You can predict this problem if the desired Arrangement does not appear in the list when each visit is selected. The Arrangements list only shows the matching arrangements for the last selected visit so if you pick one visit, then another and the Arrangement appears after the second selection but was not present in the first, that Arrangement does not match both visits.

To select and open a current and a prior visit for concurrent viewing (ie in a current/prior Arrangement) you can select the visits from the main Visit list or pick one from the main visit list and then the prior (or vice versa) from the Priors list. You can select multiple priors from either list, but its most straight forward to pick one from the main Visit list and the others from the Priors list (which is somewhat misnamed. Should be "other visits for this patient" or something). After making your visit selections, double click an Arrangement or, if you know there is an applicable auto-selectable Arrangement let auto selection handle it, just make sure the auto select option is on and click View/View and Close.

Arrangement Application Notes

Auto-arrangement selection: if you select 3 visits and a multiple visit arrangement matches the newest visit selected that arrangement will be applied to the number of visits it can handle and the other selected visits will not open.

To check if an Arrangement might be applicable to a visit, if a visit's characterization string shares any common items with the arrangement's match string, the arrangement is considered applicable.

 the "best" arrangement is the arrangement that shares the most common items with the visit being considered.

Auto-arrangement selection: If you select 3 visits and a single visit arrangement matches the newest selected, that arrangement will be used to open that visit, then the next visit will be considered for Best Arrangement matching. If a single visit arr matches that visit, the same thing happens. If there are multiple visits left and a multiple visit arr matches, that visit and the remaining visits that fit the arr will open and any remaining visits that didn't fit the arrangement will not open. This repeats as needed. If only a single visit arr matches each time, all visits selected will open with the best arrangement that matches each visit.

Auto-arrangement selection: specifically choosing an arrangement (ie picking an arrangement in Choose Visit with a set of visits) will be roughly the same as auto-selecting the same arrangement, except that we can make more assumptions. Such as if you pick a single visit arrangement and select 4 visits, we will just open each of those 4 with the same arrangement. If the arrangement does not apply (matches no data) for a selected visit, that visit will not open with the arrangement.

The optimal way to open a current prior arrangement is to select your visits in Choose Visit and double click the desired current prior arrangement. If you just have one applicable arrangement, you could also just select the visits, make sure the auto select arrangement option is checked and click view. The arrangement you want should be selected (if it matches the newest of the visits you selected) and the two opened with the arrangement. This also applies to such arrangements that apply to more than two visits (3, 4 whatever).