

Data Relationships in OPAS

OPAS is built upon a **relational database**. A relational database is essentially a collection of connected pieces of information – each piece of information in a database is related to (almost) every other piece of information.

This is significant because typically when using computers, we think of things linearly – a Word document or email or even an Excel document – has a logical beginning, middle and end. In OPAS, you can start from any point and follow the data relationships or trail to virtually any other piece of data. There is no real beginning, middle or end to OPAS, which can make orientation difficult at first, but once you become accustomed to it, the data relationships make it much easier to store, find and retrieve information.

Take a standard concert program, for example:

Saturday, September 10, 2005 at 8:00 PM - Memorial Auditorium
Sunday, September 11, 2005 at 3:00 PM - Memorial Auditorium

NORTHERN VIRGINIA SYMPHONY Subscription Week 1

ANDREW LANE, Conductor
Benedetto Lupo, Piano

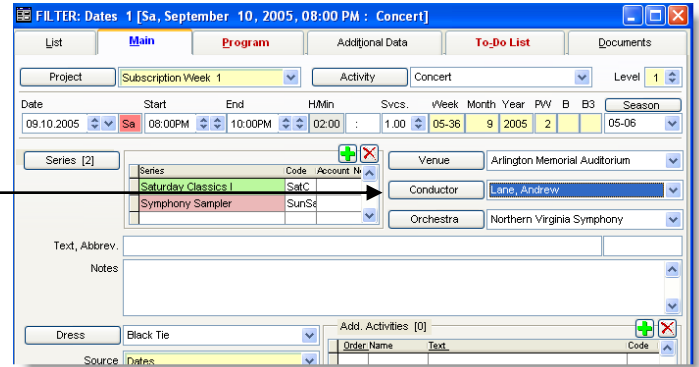
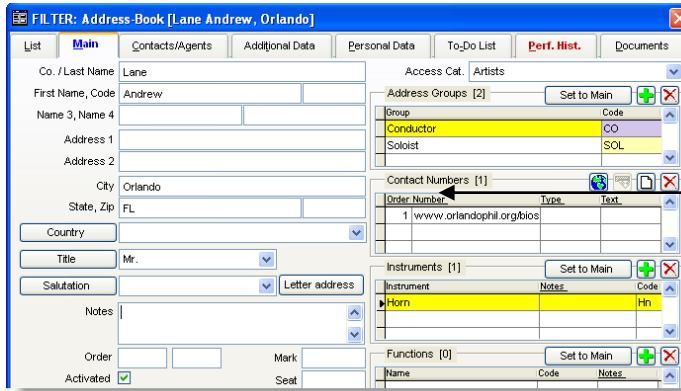
IGOR STRAVINSKY	<i>Scherzo à la russe</i> (symphonic version)	1943 - 1944
SERGEI PROKOFIEV	Concerto No. 3 in C major for Piano and Orchestra, Opus 26 I. Andante - Allegro II. Andantino III. Allegro ma non troppo Benedetto Lupo, Piano	1917 - 1921
	INTERMISSION	
JOHANNES BRAHMS	Symphony No. 2 in D Major, Op. 73 I. Allegro non troppo II. Adagio non troppo III. Allegretto grazioso (Quasi andantino) IV. Allegro con spirito	1877

We are used to thinking of this as One Thing (or perhaps Two Things – a concert each on September 10 and September 11). In OPAS, however, each element of the concert bears equal weight and is linked to every other element. Using OPAS well means understanding these relationships, and learning how to get one place starting from any other.

For example, when you create an activity (a Concert, in this example) and assign a Conductor, OPAS automatically cross-references that fact – in other words, the Conductor is *not* assigned to the Concert, the Conductor is assigned to the Concert *and* the Concert is assigned to the Conductor. Virtually all data relationships in OPAS work in this two-way manner.

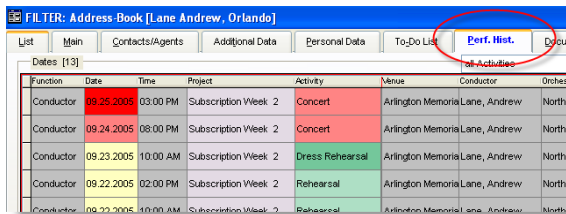
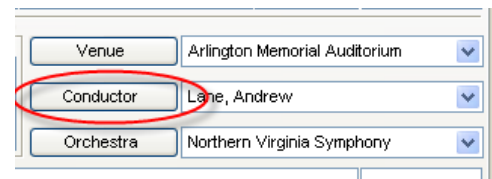
Conductors 'live' in the **Address Book**

Concerts are created in (among other areas) the **Dates** area



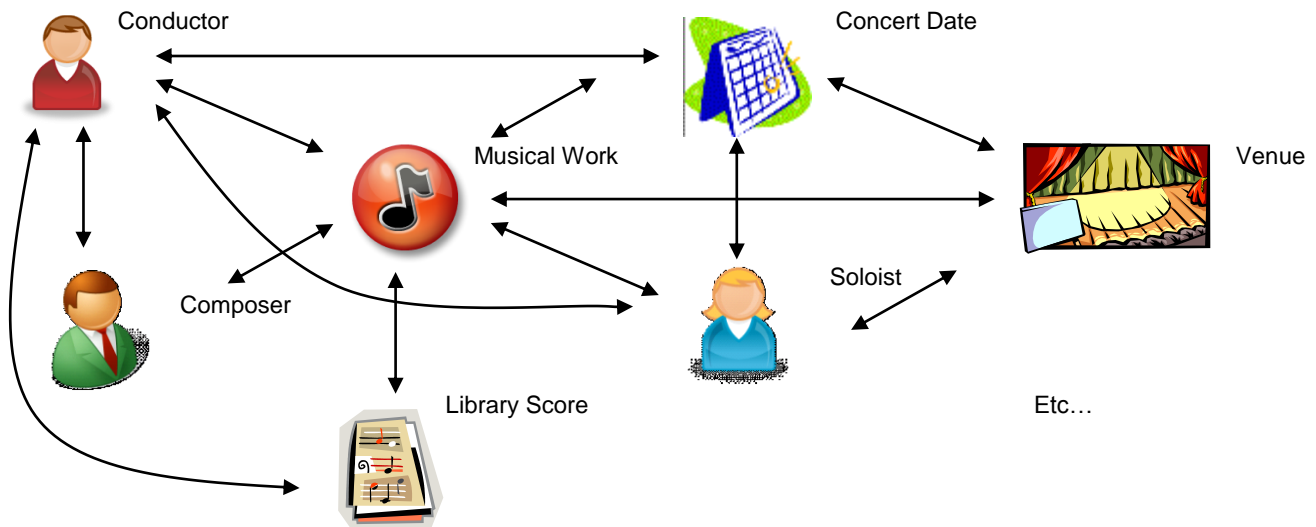
Once the two are joined, you can look at this relationship equally from either side.

Clicking the **Conductor** button from the **Dates** screen opens the conductor's record in the **Address Book**...



...and clicking the **Performance History** tab in the conductor's **Address Book** entry shows all the activities to which he or she is linked.

OPAS extends this principal to every element of our example concert. Not only are the conductor and performance linked, but so too is every musical work (and the composer for each work), the venue, soloist, etc.



Viewing Data Relationships

You needn't worry about **creating** all these data relationships in OPAS – that happens automatically through the natural use of the program. Printed reports also navigate all the links when creating (for example) program pages like the one shown above.

To **view** data relationships, you will use any and all of these methods:

Performance History Screens

Performance History screens – available in the **Address Book** for Conductors, Soloists and Venues and in the Works area – show all the data links for performances and rehearsals, much like our example above. **Performance History** screens are view-only; you do not actually create data links here, only view them.

This **Performance History** story screen is for a soloist:

Function	Date	Time	Project	Activity	Venue	Conductor	Orchestra
Soloist	09.11.2005	03:00 PM	Subscription Week 1	Concert	Arlington Memoria Lane, Andrew	Norther	
Soloist	09.10.2005	08:00 PM	Subscription Week 1	Concert	Arlington Memoria Lane, Andrew	Norther	
Soloist	09.09.2005	10:00 AM	Subscription Week 4	Rehearsal	Arlington Memoria Lane, Andrew	Norther	
			Prokofiev, Sergei: CONCERTO, PIANO, NO. 3, IN C MAJOR, OP. 26				
Soloist	09.08.2005	02:00 PM	Subscription Week 1	Rehearsal	Arlington Memoria Lane, Andrew	Norther	
Soloist	03.14.2004	03:00 PM	Subscription Week 5	Concert	Arlington Memoria Ling, Jahja	Norther	

Note that each column shows linked information and whenever you **float** your mouse over the date on any **Performance History** screen, the program and other information will 'pop-up'

Use this when...

- You want to see the last time a particular work was performed
- You want to see the last time a certain performer appeared with your orchestra
- You want to see performance histories

Drop-Down Labels


Each drop-down field in OPAS is labeled with a button. Clicking the button opens the area of OPAS in which the linked data resides.

For example, in the **Dates** area of OPAS, each of these drop-down fields shows information from the **Address Book** that is linked to this concert. Clicking the Venue button would open the **Address Book** and automatically load that Venue.

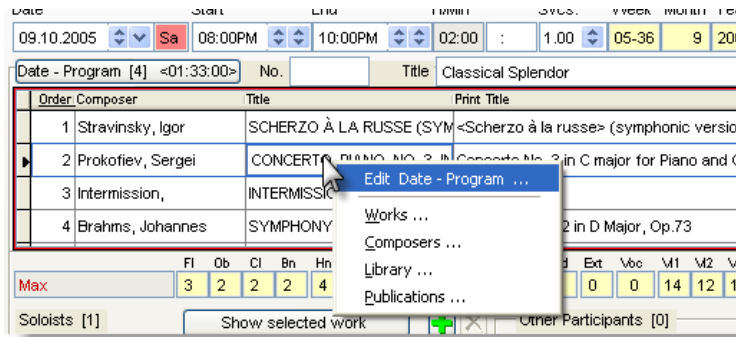
Use this when...

- You want to see or change information related to the item in the drop-down list (to look up the Conductor's agent, for example)
- You want to find specific information (you can click the button while in the Search Mode)

Right Mouse Clicks

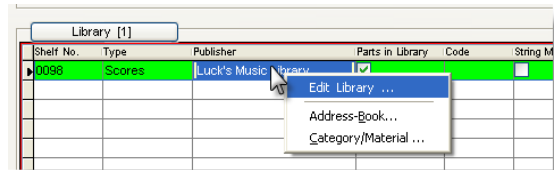
Right-clicking your mouse  within **Grids** has the same effect as clicking a drop-down label, except this method is used only in grids (where there aren't labels to click)

This is the Program Grid – all the works performed – for the concert in our example on page 1. When you **right**-click your mouse on any work within the grid, OPAS displays the context menu shown here. Clicking (regular left-click) on any of the menu items will display the:



- **Date-Program** – how this work was performed on this date
- The composition in the **Works** area of OPAS
- The **Composer** linked to the composition (Prokofiev in the example above)
- Any **Library** scores you may have for the composition
- Any **Publication** records for the composition

Obviously, the context menu that pops up will change, depending upon where it is applied. For example, right-clicking your mouse in the Library grid of the **Works** area brings up a very different menu:

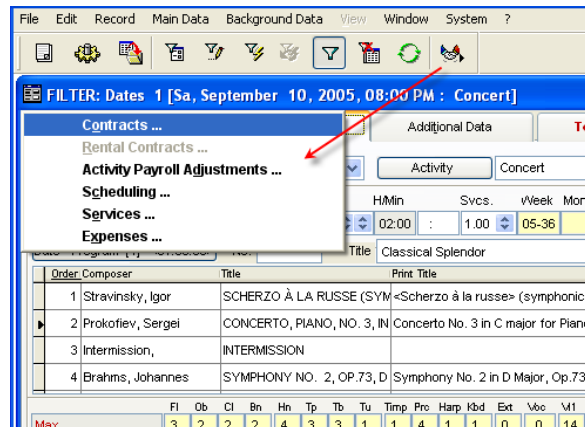


Use this when...

- You want to see or change information related to the item in the grid
- You want to find specific information – you can right-click while in the Search Mode

The Linked Data icon

Most areas of OPAS utilize the **Linked Data icon** – this is used when we are linking to an entire program area of OPAS and not just one record in the program area and/or when the link will be used to create new items.



Using the same concert from our program on page 1, when we click the Linked Data icon, OPAS opens a context menu. Clicking (regular left-click) on any of the menu items will open:

- All Soloist and Conductor **Contracts** you may have created for this concert
- All score **Rental Contracts** for all works on the program
- **The Activity Payroll**

Adjustments area on which global pay adjustments can be viewed and/or applied

- The **Scheduling** area which shows attributes of the calendar day on which the activity appears
- All orchestra member **Services** linked to this activity
- All **Expenses** linked to this activity

As with the right-mouse-click function above, the **Linked Data** icon displays a context menu specific to the area in which it is applied

Use this when...

- You want to see or change information related to the entire data record and not just a single element (in our example above, the program areas on the context menu are related to the concert itself, not one particular element of the concert)