

Husar real estate system, maintenance plan

Per Eneborg, 2011-03-30

Introduction

Husar

Husar is the main system used, in Akelius Sweden, to gather and process information and actions about our real estates.

The system allows the user to find information about our tenants; information is imported from 3L, the real estate as a whole, every building, stairwell and apartment.

The structure of the program is built upon connections throughout a real estate as in the following example.

- Real estate
- Building
- Stairwell
- Apartment
- Room
- Unit
- Detail

When opening the first level, “real estate”, all of the buildings connected to the real estate are shown. When choosing which building to have a closer look upon, all stairwells connected to that specific building are shown and so on.

Husar enables you to go as far as registering actions on articles within details, for example; “replace thermostat in refrigerator”. Because of this structure we are able to get statistics and letting the system search for information in, for example, a geographic area.

Only the effort put in, and in some ways imagination, sets the boundaries of how detailed you want the system to be.

In this report I will focus on the registration of maintenance and the benefits Husar provides with the opportunities for creating a maintenance plan.

Maintenance status

In the example above I described different levels of how the system is setup. In Husar there are windows especially assigned the maintenance-status. The status-window shows different spaces and their units that need recurring maintenance and therefore are of interest to keep on record. The maintenance-status can be located in specific areas, for example, a stairwell or apartment.

Underhållsstatus											
Ludvikagatan 45											
14182 IZET KAMARIC											
Underhållsstatus Tillval/VLU											
Uttrymme/By...	RumsNr	Enhet	EnhetNr	Åtgärd	Åtgärdstyp	HLU-JaTack	Beställt	Utfört	Planerat	Intervall	U
Badrum		Golv Plastmatt		bytes	Periodiskt underhåll			1979-01	2004-01	25 år	
Badrum		Väggar/Tak		Helmålning	Periodiskt underhåll			1999-01	2011-01	12 år	
Hall		Golv Plastmatt		bytes	Periodiskt underhåll			2003-01	2028-01	25 år	
Hall		Väggar/Tak		Helmålning	Periodiskt underhåll			1999-01	2011-01	12 år	
Kök		Väggar/Tak		Helmålning	Periodiskt underhåll			1999-01	2011-01	12 år	
Kök		Spis		bytes	Periodiskt underhåll			1979-01	1996-01	17 år	
Kök		Snickeri		målas	Periodiskt underhåll			1999-01	2011-01	12 år	
Kök		Kyl/Sval		bytes	Periodiskt underhåll			1979-01	1996-01	17 år	
Kök		Golv Plastmatt		bytes	Periodiskt underhåll			2003-01	2028-01	25 år	
Kök		Frys		bytes	Periodiskt underhåll			2000-02	2017-02	17 år	
Sovrum	1	Golv Plastmatt		bytes	Periodiskt underhåll			2004-06	2029-06	25 år	
Sovrum	2	Golv Plastmatt		bytes	Periodiskt underhåll			2004-06	2029-06	25 år	
Sovrum	2	Väggar/Tak		Helmålning	Periodiskt underhåll			1999-01	2011-01	12 år	
Sovrum	1	Väggar/Tak		Helmålning	Periodiskt underhåll			1999-01	2011-01	12 år	
Vardagsrum		Golv Parkett		slipas,Jackas	Periodiskt underhåll			1988-01	2005-01	17 år	
Vardagsrum		Väggar/Tak		Helmålning	Periodiskt underhåll			1999-01	2011-01	12 år	

Every building or apartment has its spaces and every space is assigned relevant units and how and when the next maintenance measure is executed.

The intervals between the measures are often created as default and therefore not always a usable tool in forecasting future maintenance.

Utfört	Planerat	Intervall	U
1979-01	2004-01	25 år	
1999-01	2011-01	12 år	
2003-01	2028-01	25 år	
1999-01	2011-01	12 år	
1999-01	2011-01	12 år	
1979-01	1996-01	17 år	
1999-01	2011-01	12 år	
1979-01	1996-01	17 år	
2003-01	2028-01	25 år	
2000-02	2017-02	17 år	
2004-06	2029-06	25 år	
2004-06	2029-06	25 år	
1999-01	2011-01	12 år	
1999-01	2011-01	12 år	
1988-01	2005-01	17 år	
1999-01	2011-01	12 år	

As we use Husar today, it is up to the user of the system to update the units when any maintenance is performed on the listed units in the status-window. This is, of course, of great importance in order to have reliable data. However, there are alternatives to make the updating work automatically.

Running maintenance

Handling service orders

A service order is, as the word implies, an order of maintenance or service needed or requested from, for example, a tenant. In Sweden today, we have outsourced the collecting of service orders to different external call-centers or entrepreneurs. In any case is that when a service order is received it is registered in Husar.

The service order is connected to an object within our real estates and, automatically, to the person or department who will execute the order. The service order is then available for the executer to print out and when the order is carried out the order is reported back in Husar.

In most cases a typical service order does not generate maintenance in the sense that it is not significant enough to make a difference in the overall status of the particular unit served. But, if the unit, for example, is not worth repairing but is to be replaced instead, when reported back in Husar you have the choice of updating the status of the unit.

In the maintenance status of the apartment it will show that the unit has been replaced at the same date as the executer re-submitted the service order.

Entrepreneur portal

In most cases the personnel executing the orders do not have access to Husar. Instead we have a web-based portal where the building contractor logs on and downloads their orders. The building contractor portal is directly linked to Husar which means that when a service order is re-submitted, it is instantly updated in Husar.

Maintenance plan

As Husar enables the user to keep record of executed maintenance it also features the possibility to plan coming maintenance.

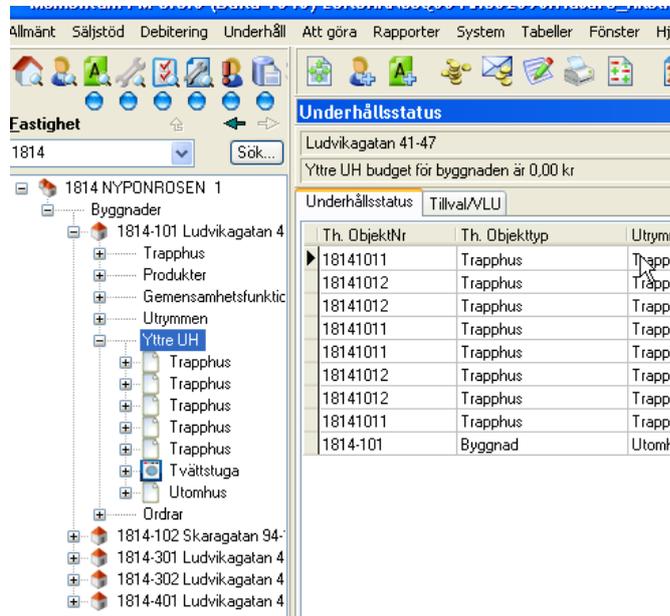
When opening a unit in the maintenance status window, there is a box, planed date, where the date of upcoming measure can be registered.



The screenshot shows a form with three date selection fields: 'Utfördatum' (set to 2003-01-01), 'Beställdatum', and 'Planeratdatum'. An arrow points to the 'Planeratdatum' field, which is currently empty. Below these fields is a 'Prioritet' label.

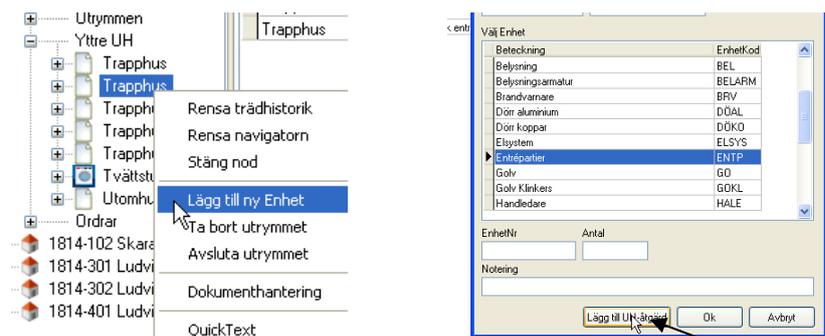
This is more useful when registering maintenance measures of greater dignity because of the opportunity of compiling the information into a report.

One way of registering or planning maintenance is through the navigator-field that shows the buildings and spaces within the real estate.



In the picture above I have chosen a *real estate/building/outer maintenance*. When marking *outer maintenance* all units that are registered under the particular building are shown.

At this level you are able to add additional maintenance measures by right clicking the space you wish to add on.



When choosing *ad new unit* the window in the right hand picture above is shown. Here you choose which unit to add to the marked space and click *add maintenance measure* which opens an additional window.

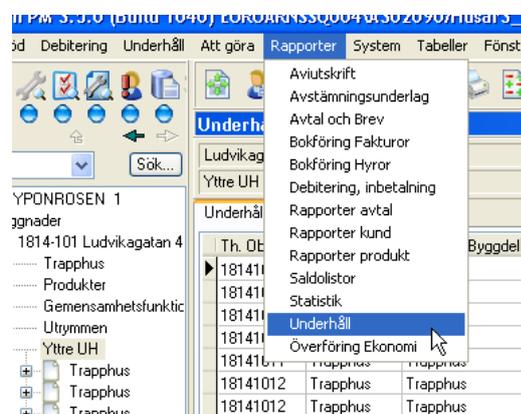
Here you can add information such as budgeted cost and planned date of the measure. By adding information in this window you enhance the option to search for measures and narrow down your search-results to include only relevant measures.

Repeating these steps with all measures that are planned within the building results in the following maintenance status.

Th	ObjektNr	Th	Objekttyp	Utrymme/Byggd	RumsNr	Enhet	EnhetNr	Åtgärd	Åtgärdstyp	HLU-JaTack	Beställt	Utfört	Planerat	Intervall	UH-orsak	Kostnad	Restvärde
18141011	Trapphus	Trapphus				Belysningsarmatur		bytes	Periodiskt underhåll		1979-01	2011-05	99 år			20 000	
18141012	Trapphus	Trapphus				Belysningsarmatur		bytes	Periodiskt underhåll		1979-01	2011-05	99 år			20 000	
18141012	Trapphus	Trapphus				Entrépartier		målas	Periodiskt underhåll		1979-01	2012-01	99 år			25 000	
18141011	Trapphus	Trapphus				Entrépartier		målas	Periodiskt underhåll		1979-01	2012-01	99 år			25 000	
18141011	Trapphus	Trapphus				Golv		bytes	Periodiskt underhåll		1979-01	2078-01	99 år				
18141012	Trapphus	Trapphus				Golv		bytes	Periodiskt underhåll		1979-01	2078-01	99 år				
18141012	Trapphus	Trapphus				väggar/tak entrép		målas	Periodiskt underhåll		1979-01	2013-01	12 år			70 000	
18141011	Trapphus	Trapphus				väggar/tak entrép		målas	Periodiskt underhåll		1979-01	2013-01	12 år			70 000	
1814-101	Byggnad	Utomhus				Yttertak		målas	Periodiskt underhåll		1979-01	2011-06	99 år			150 000	

This list can be sorted in all columns.

To create a compiled document of all planned maintenance you can use the reports in the menu-bar.

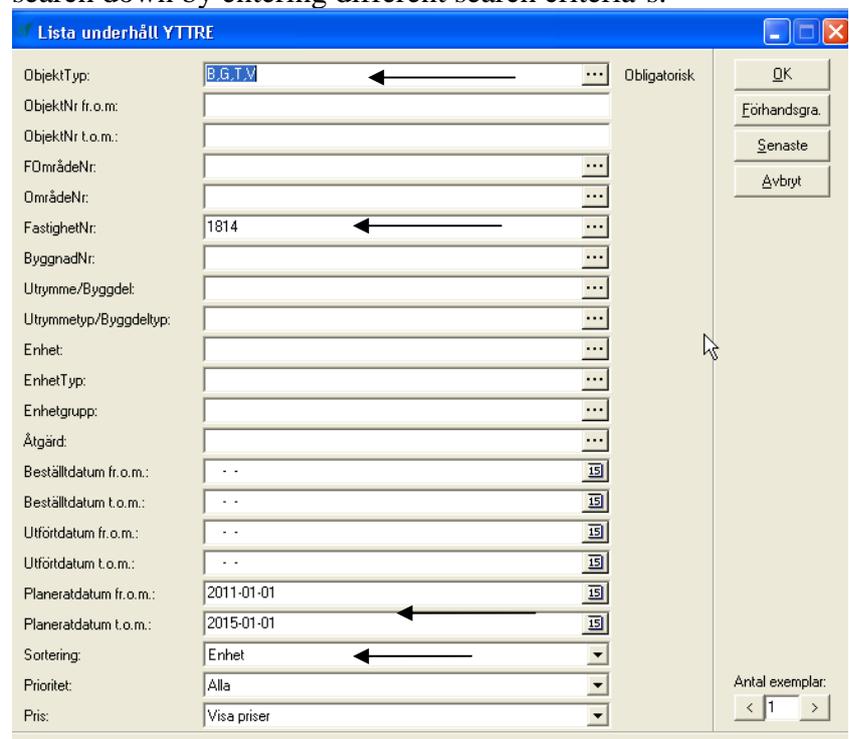


Here you create a maintenance plan.
The first window enables you to choose which type of maintenance you wish to search for.



In this case I am interested in the outer maintenance.

The next window is the search window. Here you narrow the search down by entering different search criteria's.



In this case I started with the only mandatory box that suggests which type of object I wish to search for.

The next arrow is within which physical unit I wish to search. I have chosen *real estate* but you can narrow it down to *building*, *space* or *unit*.

The third arrow is pointing towards the time-frame I have selected and in this case I have chosen to narrow the search to a interval of when the measures are planned to be executed

The last arrow indicates how I wish to sort the information I am looking for.

The result of the selections I made is the following document.

<u>Enhet</u>	<u>Adress</u>	<u>Utrymme/Byggnad</u>	<u>Enhet/Åtgärd/Åtgärdsstyp</u>	<u>Utfört</u>	<u>Plan. Pr.</u>	<u>VJ</u>
Yttre underhåll Trapphus, Våningsplan, Gemensamhetsfunktion, Byggnad						
Belysningsarmatur						
Trapphus 18141011	LUDVIKAGATAN 41	Trapphus	Belysningsarmatur/bytes/PER	1979	2011	M
Trapphus 18141012	Ludvikagatan 43	Trapphus	Belysningsarmatur/bytes/PER	1979	2011	M
Summa pris för 2 st enheter inom Enhet Belysningsarmatur						
Entrépartier						
Trapphus 18141011	LUDVIKAGATAN 41	Trapphus	Entrépartier/målas/PER	1979	2012	M
Trapphus 18141012	Ludvikagatan 43	Trapphus	Entrépartier/målas/PER	1979	2012	M
Summa pris för 2 st enheter inom Enhet Entrépartier						
väggar/tak entréplan målas						
Trapphus 18141011	LUDVIKAGATAN 41	Trapphus	väggar/tak entréplan målas/målas/PER	1979	2013	M
Trapphus 18141012	Ludvikagatan 43	Trapphus	väggar/tak entréplan målas/målas/PER	1979	2013	M
Summa pris för 2 st enheter inom Enhet väggar/tak entréplan målas						
Yttertak						
Byggnad 1814-101	Ludvikagatan 41-47	Utomhus	Yttertak/målas/PER	1979	2011	H
Summa pris för 1 st enheter inom Enhet Yttertak						

Summary

Husar has many opportunities for developing the management of maintenance and maintenance plans. We use it to record and keep track of the maintenance in our apartments and to keep track of all service orders and those functions work, my experience of it is just fine.

The structure of the outer maintenance is still too weak and does not provide the accessibility and flexibility that I, personally, would prefer, but I am sure that this can be adjusted to our organization.