

Software: Intelligent Data Loading

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Toscolano Maderno, September 10, 2023.

Hi, my name is Oscar de Micheli, I am available to provide you with all the software and information relating to IDL for FREE, and possibly also free support for 6 months, to help you manage the program, which I consider the best software for car/motorcycle racing .

For about 30 years I have dedicated all my free time to the creation of this software which I take care of down to the smallest details. Based on the operation and security, you can communicate with all people on my site. On 15/17 September there is the GT race in Monza, Massimo Delprete will be present at the 'Audi Sport Italia' team, which has been using this software for 25 years, where he will be able to give you a concrete demonstration of the use of IDL. Alternatively, if you have a person who speaks Italian, you can do a demonstration with EnyDesk (version downloadable from my website).

[Video in English: demonstration of the I.D.L. software with Real Time, Copy and Paste, Manual Times](#)

[Document \(video in English\): RUNSHEET-8165 in PDF](#)

[Video in Italian: Included the engineers can go to the bathroom during a training session](#)

[Channel on YOUTUBE with 15 videos in sequence with all the functions of I.D.L.](#)

If you would like to install IDL for a trial of the software, submit the document for a complete IDL installation in just 30 minutes.

[Document request for IDL installation](#)

I have hearing and vocal difficulties in speaking English, but we will find a form of collaboration.

Thanks for the attention.

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Curriculum vitae

Oscar de Micheli was born in Milan on April 21, 1948. He lives in Toscolano Maderno, Italy.

Studies: compulsory 5+3 years from 1955 to 1962.

1962-1963, Six-month course (October/March) as a mechanographic panelist, at the Polytechnic of Commerce of the Lombardy Region (result: first in the course at 14 years).

In May 1963, (at 15 years and ten days), I started my first job in an important mechanical company, as an apprentice mechanographic panelist.

January 1972, he married Piera.

In June 1973, their only daughter Silvia was born.

In April 1973, hired by an important European pharmaceutical company (about 1,000 connected terminals) as manager, programmer analyst.

From 1981 to 1996, I was a part-time beta tester for Apple and Microsoft, performing checks and bug fixes on various Apple and Microsoft software in Italian.

In 1975, a cousin of mine, Gabriele Seresina, created a car team: "EUROTEAM" which is how I started attending various car races in Italy: F3 and Superturismo.

From 1985, my cousin's team: "EUROTEAM" began to collaborate with various car manufacturers: Reynard, Alfa Romeo, BMW, Opel, and others, starting to make important races as an Official Team for example 2 years in the DTM with Alfa Romeo, two years at Le Mans (24 hours) with a Ferrari F40, all this allowed me to work alongside important track engineers who taught me a lot in all their work, and for two years I continued to update my software that I called IDL, in the previous 40 years I had only written management programs, now I wanted to create a software that excluded the keyboard as much as possible, creating various situations to avoid it, that's why it's called: **Intelligent Data Loading**.

In 1993, I started writing a program for the complete management of a professional racing team, supporting: the team manager, the track engineer, the sports director, the chief mechanic, the warehouse worker, the tire fitter.

There was also a real-time connection to the car's telemetry for direct control by the track engineer (see data taken from: Marelli, Bosch, Pi).

In 1994, the technical director of Audi Sport Dieter Gass asked me to do a demonstration in front of all the engineers of Audi Sport in Ingolstadt in the presence of Team Principal Dr. Wolfgang Ullrich.

In that period Audi participated in all the Superturismo championships with two cars in the following countries: Germany, Italy, France, England, Spain, Argentina, South Africa, New Zealand, the cars were managed by private Audi reference teams, their problem was to control all the work of the different teams given that in some races, there was no Audi supervisor. Then, after having positively evaluated my software, I was asked to have the entire race weekend via email and to be able to import it onto a single computer in Ingolstadt. Given the positive attention from Audi, in the winter of 1994, I made numerous corrections to the export of data (runshett, setup, tires, etc.) for insertion into a text file (on my site there is a demonstration of these two functions) from the import and export for all sessions during the race weekend).

In February 1995, Audi purchased 10 devices and licenses from a European pharmaceutical subsidiary where I had worked as a programmer since 1973, called "PROPELLER", thus starting the distribution of IDL.

Other companies followed which are not teams but are only manufacturers of racing cars. On the IDL website there are all the companies that have purchased the licenses with their relevant contact persons. I think that from 1995 to today more than 100 race engineers have used IDL, some of these have helped me also grow IDL with many other features, all not invented by me, but requested by true professionals of this type of work.

1996 Sergio Rinland (Brabhan f1) RACING CAR

From 1996 to 1998, through the Ferrari f1 engineer Luca Baldisseri, entrusting Luca with a pen computer, I did 3 years of demonstrations in the winter December March the drivers in 1996/1997 were Berger and Alesi and in 1997/1998 it was Schumacher and Irwine, it was Luca who made me insert several audio recorders into IDL in 1996, in particular the one that recorded the dialogue between the driver and the technician, which was recorded using a number to separate the individual recordings: run by run. During the session, Luca recorded a dialogue with a pilot who then denied what he had said in the briefing, saying something else!

In February 1998 we stopped the demo, even though Luca really wanted to buy IDL, his bosses decided not to, but he helped grow IDL.

In the early 2000s, Audi entered an endurance race in the United States for the first time, winning the championship and then participating in Les Mans (24 Hours) for three years, the only manufacturer to finish first, second and third with Audi Sport, using the IDL program.

In 2000, IDL was modified to include a new feature called PitStop which theoretically allows 24 hours of theoretical viewing until the end of the race.

Therefore, IDL survived 24 hours of continuous use, without ever stopping.

The IDL software was only sold to racing car manufacturers (see website), but in 2002/2003 a change was made regarding the work of the tire specialists of the Pirelli tire manufacturers in the respective Teams.

Since 2010 all telemetry (Marelli, Bosch, Pi) has been heavily modified and the new versions no longer provide the possibility of receiving data directly from telemetry to the IDL, and real time has been banned in all races. European except F1.

The engineers using IDL were forced to manually enter the times taken from the Official timing service, from Audi Sport, I was asked for the possibility of acquiring data from these services, unfortunately each track or race manager had different websites and therefore it was impossible to manage these different systems.

Starting from 2018 I began to examine some sites and I noticed the ALKAMEL site, which was used for many races, even different ones, and which was also offered in the United States, and also in some Italian racetracks, so much so that for Audi Sport Italia, I started modifying IDL to capture all site data with a simple copy and paste.

In 2019, I implemented these changes for the ALKAMEL site, by making the following change I abandoned the module (called -TELE-) that took f1 or DTM telemetry data, and created a new module (called -CHRONO-) that mainly acquires all the information with copy and paste and then a protocol to acquire everything in real time from the Official Timing Service.

-TELE- LINK HISTORICAL PDF DOCUMENT OF 1995 FOR USE OF MARELLI TELEMETRY

-CHRONO- Pdf DOCUMENT OF 2023 TO AUTOMATICALLY CREATE A REAL TIME

In 2021, I also made the same changes for the official Perugia Timing website.

For a few years, F1 manufacturers have had their own simulator that allows automatic configuration change, so the IDL system is replaced by the use of the simulator.

Sectors went from 3-4-5 to one every 5 seconds, so many people need to watch telemetry every 5 seconds.

The problem with these simulators is that they are all different from each other, so there is no standard. Sergio Rinland is working at Oxford University to create a simulator, which will be tested in the hope that it will become a standard.

I don't know what Audi Sport will decide when it enters F1 in 2026 (it's almost official now) and whether it will want to connect IDL to its simulator.

Having known Audi for 30 years, it will certainly be among the top three teams within a year of its debut. Keep an eye on a young man named Drudi, who has been using the Audi simulator daily for a year.

This is my story of 30 years dedicated to guaranteeing the security of IDL and a unique system in the world, for me IDL has never been a job but rather the hobby of my life, being able to create software that, thanks to the help of many professional engineers.

You can use IDL with 10,000 (functions, buttons) in about 400,000 lines of code, without ever using the keyboard.

Looking at IDL some modules may seem too rich in functions and fields, this is not my decision, but is the result of continuous use by the track engineers, who normally during a session, have the radio button to talk to the pilot and therefore have only one free hand, with which to enter all the pilot's information in real time. Using only the mouse, in addition to entering the pilot's notes, which can be: verbal using an audio recorder, or selected from a ready-made list to be inserted as notes within the IDL worksheet.

I am not a phenomenon in my life, I only met a genius, (my colleague for 15 years) named Walter Sciancalepore, who taught me many things, but I never reached his level, but I have something that few can boast of : 60 years (1963-2023) of experience in using almost all programming languages and almost all databases, existing on all major computers for administrative use, and above all my passion for this type of work.

[My program on iPhone “shopping list”](#)

[My Computers 1962-2023...](#)

I apologize for the translation, if you have any problems ask GOOGLE.

Oscar de Micheli I only speak Italian.

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The IDL software Intelligent Data Loading has been distributed since 1994, with the task of storing, automating and simplifying all the data management of the track engineer and of a racing team.

For over 25 years, thanks to the advice of many expert engineers, it has been used by about a hundred people on almost all the tracks in the world and in almost all the championships (f1 fe GT f3 DTM Le Mans etc.) both with internal combustion engines and electrified.

Since 2010, with the release of first 32-bit, then 64-bit operating systems, IDL which was written in 1993, on computers running 16-bit Windows 3.1 workgroup, started to have compatibility problems with 64-bit systems, so since 2010, after having done many tests, it was decided to use Oracle's VirtualBox, software for the virtual management of many operating systems, including all the old versions of Windows, Ms-Dos, Mac, Linux, etc.

No problem on Apple computers, as it is possible to partition the system, using Apple's Boot Camp, which allows you to directly load Windows XP in which IDL will be installed.

Oracle's VirtualBox software is free, no license or registration is required.

Obviously this created problems for many customers, who in the meantime used much more advanced computers and decided to leave this system. Others have continued to use IDL under VirtualBox as they did on their old WindowsXP computers without experiencing any problems

we can guarantee that from 2010 to today, VirtualBox, in all its various versions: from 4 to 6 from windows7 to windows10, with IDL installed has never given any functioning problems.

Making the most of all the opportunities of VirtualBox we managed to install IDL on a windows10 computer in just 30 minutes, in a simple way, without complications and above all without having to restart your computer. You need of 10 GB of space on your hard disk or SSD.

If after doing all the tests; IDL does not satisfy you or you are not interested, you can uninstall it, simply by eliminating VirtualBox – Windows Xp and IDL, all without having to restart win10.

This demonstrates the transparency of VirtualBox, which was created by Oracle, mainly to be able to use its relational databases, inserted in operating systems (PC or Mac) that have become obsolete over time.

The IDL software for acquiring driver times used telemetry, from Marelli or Bosch, using up to 30 channels to control engine parameters and various temperatures.

The regulations have changed in recent years, currently only f1 can use real time, and in the case of fe, not even the legendary pit wall exists anymore, these modifications have in fact changed the way track engineers work, many of them have organized small spaces (similar to offices) inside their boxes.

For some years, the f1 teams have been using their own simulators that virtually simulate the behavior of the car, the setup is created and managed by the simulator, bringing all the data generated to the track engineer's computer, therefore our IDL software for f1 it is no longer used.

Since 2018, by examining the official websites used by timekeepers, we have modified IDL to be able to acquire all the information on the times in a semi/automatic way, so now the IDL target is aimed at all competitions that do not provide real time to telemetry .

Unfortunately, only in a few cases has it been possible to acquire (in a few seconds) all the times as the driver passes, since each racetrack has its own timing system and its own website, only in a few cases it is possible to acquire the times easily and almost automatically.

In 2019, we were present at almost all the races of the Italian GT Sprint and Endurance

For the 6 Italian tracks: Monza, Mugello, Imola, Misano, Vallelunga, Pergusa, there were 5 different timing websites, only Monza and Imola, they used the same system.

From 2020, a common timing system for all Italian circuits is being discussed.

IDL-ILT (see video on our site) are ready to acquire any type of protocol, finally obtaining the automatic and real-time acquisition of all the official times, this function will still be useful also for those who use excel sheets or other programs .

We have been constantly following the work of the track engineer for over 30 years, and we have noticed how in recent years the interview with one's driver has increased significantly, also for this reason the engineer must have all the information in real time on the times especially the virtual ones compared to competitors, this reduces the time to spend on their acquisition.

Many teams have a person alongside the engineer, who enters, perhaps on an excel sheet or worse on a sheet of paper, all the data relating to the times of his own rider and of the best.

For this reason, we created in November 2020, a totally free new function within IDL called ILT, which allows you to copy from the official timing system website (without using the keyboard), all the times of your driver and the best ever, this feature can be used directly by the engineer while talking to the pilot.

With the new ILT functionality the engineer has all the information; times and setup, to communicate with the rider a few seconds after crossing the finish line, without the stress of looking at the monitor and entering the relative times, this is fundamental in tests and official practices, where everything must be decided in the shortest possible time without having to constantly keep an eye on the time monitors, having everything, absolutely everything, grouped on a single page of his computer.

Especially during endurance races, such as the 24 hour race, all this may not be useful. There has been a quick function since 1995, which uses the track engineer directly to enter only the lap time, and a function dedicated to the real pit stop and theoretical that projects the times until the end of the race.

The new ILT function, in addition to entering times intelligently and quickly, allows, using a function already present in IDL since 1994, the automatic acquisition of all the data on times taken from the official timing service in real time.

The use of IDL is not only a technical software to help the engineer, but also serves the team to keep all this information in its database in an efficient, uniform and cataloged way.

Some Main Teams have a database in their IDL with all the sessions with times and relative setups, made by all the cars of their reference Teams from 1995 to today.

This is the true heritage of the Team, no paper, but everything clearly and uniformly displayed, and it is perhaps for this reason that some engineers prefer not to use IDL.

On our web page there are the Main Teams with reference to the people who managed IDL.

By requesting the relevant installation document, you can independently; download, install and try the IDL program complete with time sharing and the new ILT function:

IDL that can be used free of charge for a maximum of 100 times with the name of the Team:

“IDL Software”,

once you reach 100, it will be possible to use all the IDL functions without time limits, but it will no longer be possible to insert new sessions, with this number, you can do about 2 race weekends, about 10/12 sessions which will always remain available for the subsequent consultations.

ILT new function created in 2020, reduced version compared to IDL but still complete for the insertion of: times, setup, observations, this version is incorporated in the main version so it uses the same archives: drivers, tracks, etc., for this reason everyone the user data are in the same database called CORSETA.MDB which is copied every time the program is closed, therefore it maintains all the same security features as the main version.

Massimo Delprete, has been using IDL for over 25 years, (12 years using VirtualBox), without ever having problems or blocks of his computers: Windows7 and later up to Windows10.

If after the appropriate tests, this software does not interest you, in 5 minutes you can uninstall everything without restarting the system and without leaving a trace on your computer.

It is important **to check the version number of the CORSE.MDB program.**

The CORSE.mdb file must be updated only when your version is lower than the one documented on the site www.idlsoftware.it see : **Version X.XX**

Occasionally check the relevant PDF for the latest version number.

Currently the official timing services compatible with IDL are:

PERUGIA TIMING with 3 or 4 sector management, (the 5th sector is already foreseen)

ALKAMEL (for : fe, DTM, Le Mans, and many other circuits) with 3 sectors.

[If interested in the installation, read the pdf from our web page: IDL request](#)

Performing IDL

Password for ILT: 000000 not editable.

Password for IDL: ?????? editable.

Note: Both Windows XP multi-licensed under IDL Software and Access 2.0 multi licenza, containing the database, are in Italian, while the IDL software is in English.

XP will use the peripherals of your Win10 computer.

If an internet connection is present, it will automatically be used by Windows XP as well.

On the desktop there are:

Internet Explorer: use the IDL Software web page as the home page, it's an old browser, it is **only used to download CORSE.MDB**, for the rest, use your Windows10/11 browser, passing the files to Win-XP to folder IDLXP10.

Outlook Express delete from XP desktop, no need use your Windows 10 mail system.

To close the IDL program: from the General Menu, press the "Exit IDL" button at the bottom right twice, in the case of ILT

exit with a double click on the central button at the bottom "Exit ILT".

Then proceed to close Windows XP in the lower left "Start" and "Shut Down Computer".

Date and time are automatically taken from Window10/11, it is not possible to modify them, possibly changing them from Window10/11 they will be replaced in real time on Windows XP.

Important: for IDL the system date and time must always be the current ones.

In case of copy/paste from official timing websites, use Firefox and not Edge :

https://www.mozilla.org/it/firefox/new/?redirect_source=firefox-com

Microsoft Edge is missing some features.

The only 2 files interested by the user in the IDL - ILT software are under the C:\ACCESS folder link: Monthly remember to recovery the CORSE.MDB & CORSETA.MDB files.

CORSE.MDB - is the IDL-ILT program downloaded at version: 8.40 – 31-1-2022

After installing IDL-ILT download the latest version. ([see videos](#))

CORSETA.MDB - contains the empty starting database, in which all the data will be entered produced by the Team, this is the only important file.

When you close the IDL or ILT software with the Exit function, the program automatically makes a copy of your CORSETA.MDB file present in the folder: **C:\ACCESS**

The copy is made in the folder **C:\CORSE** : on even days called : CORSETA**P**.MDB

on odd days called : CORSETA**D**.MDB

Furthermore, at the same time the same copy of the corseta.mdb file (odd or even) is made in the **?:IDLXP10** folder, which is shared with Windows10, therefore when WindowsXP is closed you will find under this folder the only file (odd and even) IMPORTANT to be saved on Cloud or on a USB stick, you can lose everything, but if you have a copy of corseta.mdb, starting from a possible reinstallation, it will be sufficient to copy this file (removing the P for even or the D for odd) under the C:\ACCESS folder.

Important: to pass data from WinXP to Win10/11 (and vice versa) for example copying PDF files, or JPG maps, or other, you can use a common USB key.

Note: some USB memories may not be compatible with Windows XP, in this case close and relaunch Windows XP, first removing the memory stick from Windows 10.

Another more practical, fast and simple possibility is to use the shared folder between WinXP and Win10 called: IDLXP10 present on the Win10 desktop under this folder there are already subfolders, for example to archive .PDF or .JPG files, it is possible to create others for your specific use, but never delete existing ones.

Note: All the various devices of your Win10/11 computer are managed automatically by VirtualBox: keyboard, mouse, pen, audio, recorder, usb, video, cd, network, etc.

It's just the printers that aren't shared between Windows 10 and Windows XP.

Unfortunately Access 2.0 released in 1992 did not provide for the generation of PDF files.

The alternative is to connect a virtual printer which creates a PDF file (see IDLXP10 shared folder) which

automatically transfers the file to Win10 and then possibly print it on the connected or network printer, or send it to Smartphone/Tablet with WhatsApp or other.

The free PDF24 XP version program is already installed on Windows XP, which allows you to automatically generate the relative PDF file starting from any IDL-ILT printout, link:

[Video : Creation of PDF files starting from any IDL/ILT printout](#)

With this option instead of printing, at the end of the weekend, you can generate all the PDF printouts: set-ups, run-sheets, times of all the drivers, tyres, km done, job list, spare parts, and much, much more, all related to the race weekend.

This operation is used to obtain a complete PDF archive of the entire race or test weekend, possibly creating a folder for each track, with relative date.

Using the IDLXP10 folder, it can then be taken to the CLOUD (Drive, iCloud, or others) allowing you to use this folder offline, allowing you to view all the work done over the weekend at any time, on a Smartphone or Tablet, without using IDL.

If after a few tests the IDL software does not interest you, it will be sufficient: delete the WINXPMIO file, then uninstall VirtualBox with the appropriate standard function of Windows 10/11.

In this case, after removing the file and VirtualBox, no trace will remain on your computer, and you won't even need to restart Windows 10/11 link: [VIDEO DELETE VIRTUALBOX.](#)

I.D.L. usage notes :

NOTE 1: All tables must contain at least one element, never delete all its elements, but leave at least one, for example the (. period or * asterisk).

The table row starting with * is used to modify the content without storing it in the related table of competence, see for example the function: Week program of IDL.

NOTE 2: of everything you have installed: VirtualBox - WindowsXP - I.D.L. the only important file is called CORSETA.MDB which contains your Data Base all the rest is however always recoverable, this greatly simplifies all the management of IDL and ILT and makes the whole system secure and reliable. Several 24 Hours of Le Mans have been done with IDL, without any problems. A recovery session is also automatically provided, which allows the recovery of all the data entered during a session, after the system has been restored.

In over 25 years of use, sensitive data has never been lost during a timing session, at the most it starts again within 3 or 4 minutes by restarting the system and entering the eventual last lap in manual mode.

In the case of Main Team, it is possible for the manufacturer to independently add up to 10 reference teams, independently distributing several copies of IDL.

For use by a Main Team, contact IDL Software, link: [Video Main Team.](#)

For the Main Teams, the empty CORSETA.MDB file will only be sent via certified email.

There is no instruction manual. On our website, there is a link to our youtube channel with 15 videos made in 2008 (unfortunately only in Italian) of about 10 minutes each, which using the automatic sequence, show all the main functions of IDL.

[YOUTUBE IDL Software 2008 channel, 15 demo videos in automatic succession](#)

[Other videos, including those for installation, link : Video : Installation and use of IDL - ILT](#)

[On our site there are some demo prints in PDF produced by I.D.L. and I.L.T.](#)

Available for further information, also using the free software: Any-Desk downloadable from our website, for a possible real-time connection with your computer, or alternatively using TeamViewer this in case of problems even during a race weekend.

Thanks for the attention. Oscar de Micheli

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Microsoft Access 2.0 history

In 1991, Microsoft beta tester for Italian translations since 1980, I received a box with 6 floppy disks of 1.44 Mb, containing the first version of Access 1.0.

It was requested to search, for possible translation errors in Italian, and to verify the integrity of the program.

Microsoft had created this new program, as object-relational database programs, such as Borland's "DBIII," were beginning to appear on the market.

Using my free time, even if I found some errors in the translations, I understood that it was an excellent program and that it also respected my programming philosophy, using the drop-down menus as little as possible, but using immediately available icons to open the various functions.

For more than twenty years I have been using relational and non-relational databases such as: Etos, Edos, Indexed, Informix, Oracle and others, knowing well the various problems of these systems.

In February 1992 I received the beta version of Access 2.0, version 1.0 had never been released on the market, the package contained 7 floppy disks and it was necessary to check the entire program in a short time. After the necessary checks, I considered this program for use in a competition team.

A few months later I received the Microsoft Access 2.0 license, so by installing the full software I started studying how to set up my program.

From the beginning I found everything very simple and fast and no problems with the code.

The thing that amazed me most was the speed of execution in database management, but knowing what the problems are with any database, I used a strategy that has proven successful over time. The track engineer must not have system crash, due to the database, therefore, I decided to open and close, one table at a time, this avoided any kind of error on the database, from that moment, all my free time, and all the summer holidays 1992 1993 1994, I spent them with a Fujitsu Stylistic 500 pen computer (monochrome resolution 640 x 480) writing thousands of lines of code using the pen and copying and pasting taking pieces of program inside the procedure.

Access 2.0 was one of the best programs produced by Microsoft (without major errors) was born in 1992 as version 2.0 and until 1997 has never undergone any updates.

Later in 1997, Access 7 was released, for the use of the new 32-bit processors.

Practically Access 2.0 has been distributed (in many countries) for 5 years without ever undergoing any update, this demonstrates the validity of this software.

I think that this 2.0 was studied by a single person, who then delegated the programming to various programmers, while he personally tested function by function and only when he believed that the program was ready, he allowed its distribution (it is exactly my behavior for 30 years, in which I worked for a large pharmaceutical company when I had about 1,000 terminals connected).

And when version **2.0** 1993 transitioned to **7.0** which was released in 1997, I believe the creator of version 2.0 left Microsoft.

An example: I tried to transfer IDL to the later version 7.0 of 1997, but due to an error in the conversion, the program crashed the computer without giving any explanation.

In that period I often went to Maranello to Ferrari where a nice character who had been number 4 at Microsoft had just arrived (I believe that even today, even if he works at Ferrari, he receives royalties for having written the Windows Kernel). I asked Luca Baldisseri to speak with him to resolve this problem.

He asked me the program that would send him to Richmond, not knowing who it was intended for, I deleted some pieces of my IDL, after a few days the following answer: "**who is that crazy person who created such a system? The program is too big and cannot be converted.**"

Basically the conversion of some pieces of the program was done in memory and therefore they would have to rewrite the conversion program.

This was a trauma for me, I knew very well that my 16-bit IDL would not last long, already in Windows 7 it sometimes gave some useless signals, but then it continued without problems, but thinking about the transition from 32 bit to 64 my IDL it wouldn't work anymore.

Since Oracle had the same problem as me, I focused on Oracle's VirtualBox, I was already using Oracle for the database in the pharmaceutical company where I worked for many years.

Oracle only distributed the Database system, but the programs to manage the data were created by individual companies using Oracle, the programming language was normally written in COBOL, so Oracle had a version for Windows. The problem presented itself in these terms: The database was 16 bit and was managed by a 16 bit program, with the advent of Windows 10 this was no longer possible.

Oracle was forced to create a program called VirtualBox capable of virtually managing different 8 or 16 bit operating systems, ditto for Apple and other operating systems.

In 2005 I started testing VirtualBox, I realized that it worked very well, even in its 3.0 version so I switched to using it as standard even though it still worked with WindowsXP.

So that without going through the installation of IDL I had already inserted everything into this file that I called WINDXPMIO (see installation video on my site) and therefore in about 30 minutes by downloading just two files from my site you can do the complete installation by **VirutalBox, Windows XP, IDL Software.**

We currently use version 6.1.16 and it works great, Massimo Delprete and some other engineers have been using it for over **10 years** without EVER HAVING ANY PROBLEMS.

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www.idlsoftware.it