

epin
user's
guide

technical, system
and application infrastructure



Infrastructure IT

 **AutoCont**

You need not bother your
head with computers,
servers and networks...



We know how.



Information infrastructure is there to ensure that your computers do what they are supposed to do. And we at Autocont CZ see to it that the infrastructure does what it is supposed to do.

We have a special division, System and Application Infrastructure (SAI), exclusively for this area, but it essentially concerns a cross-sectional activity of the entire company. Complex projects and projects for large customers are attended to by this division drawing on all its experience, the strengths of its specialists, some of whom, we may say without exaggeration, are truly world class. Infrastructural projects for other customers are dealt with by our regional centres – issuing from the knowledge of the SAI division, its experience, from research and test results – which, if necessary, can at any time ask the SAI division for advice or assistance. The SAI division is not just a production workplace, but also a large laboratory where new solutions are being devised and verified, solutions often bordering the possible itself, as manufacturers themselves have remarked.

Information system infrastructure is our work. We've been doing it for a long time, and we do it well – you don't have to take only our word for it, just inquire about us at the places where we have worked. We have had long-term experience with it, which is the only reliable manner of learning everything necessary. No one can just read about it in books and learn it overnight. Practice is decisive.

In the next few pages we will reveal more to you as regards how we contemplate IT infrastructure and how, in our opinion and according to our recommendations, you too should think about it. We will show you how and where infrastructure can directly reduce costs, where it is necessary to consider it as an operating expense, and where it serves something like an insurance function. These are, in economic terms, three very different positions, all of them important and, above all, should not be confused.

We will show you what we can do, what you can expect from us. We do not merely want to convince you that we are the best and tomorrow morning you can buy from us everything we supply. We want something else – we want to teach you how to think in a certain way. To demonstrate to you how you yourself can, rapidly, simply and at any time, assess the economic benefits of virtually everything connected with information technologies.

And why do we want to teach you this? Because, from our viewpoint, it is a useful investment.

Contents:

Everything you need to know about infrastructure but it has never occurred to you to ask	2
Making profit, saving money, insuring yourself – the three purposes of IT infrastructure	4
IT specialists and managers: two cultures	6

Everything you need to know never occurred to you to ask

According to the dictionary definition, infrastructure is “a set of mutually linked components forming the skeleton of a structure supported by them”. The infrastructure of living organisms is the skeleton, circulatory system, nervous system. The infrastructure of a country is its system of roads and railways, electricity, water, gas supplies, sewerage systems, telephone network... but also firemen, salvage and rescue services, police, and, in a rather wider sense of the word, even the extensive network of public services, from the education and health care systems to waste disposal. It depends on the angle of perception and the manner in which we, at the given moment, need to view infrastructure.

One of the very few abbreviations to be found in this brochure is IT. It means, of course, information technologies – i.e. computers, software, internet, related services, simply everything in anyway connected with computerised information processing. Occasionally, you will find instead of it the abbreviation ICT, in which the additional C means communications, communications technologies – data transmission, telephones, mobile phones, etc. At present, however, the two segments blend so seamlessly that the two abbreviations are used interchangeably.

Some parts of infrastructure are temporarily dispensable, others are not – the system would immediately collapse without them. They are called crucial infrastructure. Human beings must breathe and blood must circulate in their body; in a city freight transport and electricity supply must work; an information system must be interconnected by a network allowing for communication between computers.

Hence, in different areas the notion of infrastructure can mean very different things.

Infrastructure solutions can rapidly and directly save the company a great deal of money.

However, they have one thing in common. Guess what it is? We will reveal the answer in a while.

What comes within information system infrastructure? The answers can again be different, depending on the momentary angle of view. But we almost certainly find within it the following crucial components:

- “Big” computing technology generally shared by the entire company – it includes servers, disk arrays and similar equipment, at first glance appearing as an uninteresting grey box, this category is usually termed “back office”;
- “Small” computing technology used by individual staff, i.e. personal computers or terminals, pocket computers, local printers, etc.;
- A network interconnecting all these computers and peripheral equipment, both at one point and, for example, mutually between branches in various cities;
- Connection of a network to the “outer world”, i.e. primarily to the internet;
- Means of supervision and control of the entire information system;
- Security measures – against data destruction or abuse, against emergency events such as flood, against external attacks;
- Services focused on permanent user support;
- Services focused on more sophisticated technical support, possibly on tackling emergency situations.

This in all likelihood does not comply with the manner in which you contemplate information



technologies in your company – which is all right! It is not the view of a user, but that of an architect and operator of a system. When you buy a flat, you mainly think of how to lay out the furniture, what colour to paint the walls, how to make your life there pleasant and comfortable. And what is even more important – after some time not even that. The flat and its furnishings are a given thing for you. Invisible in a way.

about infrastructure but it has

You should not consider business IT infrastructure a necessary evil, but an opportunity for working more effectively.



We are fully conscious of infrastructure only when something goes wrong with it.

As long as it works properly, no one gives it a thought. Even when it comes to bills for infrastructural services provided to our households, almost everyone pays them by cheque or standing order. Only occasionally do we calculate the figures, sigh and shrug since there is nothing we can do about it.

Of course, it is different if there is a power cut, the water stops running, an alarm device breaks. Or something even worse happens. We are fully conscious of infrastructure only when something goes wrong with it.

Do you know what? It is now time to have a slightly different view of it. When it comes to business IT infrastructure, you should think of it more actively than passively. Taking it not as a matter of course and a necessary evil, but as an element you can affect and which in turn affects the company's functioning as a whole. As a factor that can bring to you both good and bad things, according to how you approach it.

Infrastructure solutions can directly and rapidly save a company a lot of money. Serving as examples can be consolidation of servers or smart printing solutions – we will deal with both of these, alongside other examples, later on in a comprehensible and clear manner.

Infrastructure solutions can, however, also – if they are badly designed and operated, which can unfortunately occur quite easily – cause great damage. A clear example is an imperfect security solution that is not able to protect a company against breakdown with data loss. What if, two days before pay-day, you lose all personnel and wage data of all employees and there is nowhere to replace them from? The more we rely on electronic forms of saving information, the more thoroughly we must secure ourselves against similar emergencies.

Instead of the milieu, you perceive the life you are living in it. Talks with people, pleasures and worries, work and relaxation, intentions and plans.

Under a lamp you help your son with writing his homework, and while doing so you think of his results in mathematics, of your next holiday, maybe of your interview yesterday

with the boss. The last thing on our mind is the electric current from the socket, the heat from the radiator, the sealed windows. Nor do you think of the layout of sockets thanks to which the desk can comfortably stand where it stands.

Are you now aware of what infrastructure in all walks of life and work has in common?

Making profit, saving money, purposes of IT infrastructure

From the economic viewpoint, there are three ways of looking at IT infrastructure. In some cases, it can directly and demonstrably reduce costs. Then it concerns an investment with an identifiable pay-off period. At another time, it is necessary to view it as a purchase and operating cost. In that case, it makes sense to strive to minimise it, but only when retaining the necessary quality of service. Finally, IT infrastructure can have an economic relevance identical to insurance — it does not bring about anything either directly or indirectly, it rather serves as security so as to prevent damage. Then the usual logic of insurance costs holds true, i.e. three figures are compared: the probability of an emergency situation, the expected level of damage and the price of insurance.

Let us have a look at all three possibilities in more detail. We will show you examples of our work within individual segments. We will describe how we think of the supplied solutions and how, in our opinion, a customer should think of them.

IT infrastructure in an investment primarily when it concerns replacement of the current manner of doing things with something cheaper without decreasing quality — or with something entirely new attaining a totally new level of quality. We supply three large groups of solutions meeting this criterion.

IT infrastructure as an investment: it concerns the pay-off period.

The first and easiest to comprehend is business printing solutions. It is remarkable how little attention most companies pay to costs connected with printing. The paperless

office is a totally idealistic conception, every company works with a vast amount of printed paper and buying it costs something — it concerns multiplication of small figures by large ones. We supply solutions allowing you, on the one hand, to get these costs under control, to gain a perfect continuous summary, and, on the other, to significantly reduce them. We always begin with accounting of the current costs, hence the calculation of the guaranteed investment return is very easy. Just as every company keeps an eye on its costs connected with using cars and mobile phones, so should it also view printing in the same terms.

IT infrastructure as insurance: it concerns the correct risk-price ratio.

Similar is the case of other investments. Did you know that an average server's capacity is utilised at between 5 to 30%? It means that 70 to 95% of the capacity is acquired unnecessarily and purposelessly. Do you have in your company a car, crane, machine tool that you can afford to make use of only to the extent of five to thirty per cent? Hardly. As regards computing technology, in the past it was difficult to prevent it since the capacity had to be over-designed owing to occasional peak loads. Nowadays, it is possible to do it otherwise. Consolidation of servers rests in the fact that thanks to a smart software solution the number of these expensive and powerful computers is significantly reduced (in some cases from hundreds to several) without the quality of services deteriorating. The solution allows you to work with the servers' output dynamically, according to the company's needs, and to increase the utilisation of their capacity to as much as 70 to 80% (of course, not up to 100%, a reserve is not only suitable but also necessary — one never knows). Truly substantial is the benefit of such a solution for companies planning renovation or extension



of server equipment; in this case the resulting saving runs into tens of per cent as against traditional purchase of redundant technology. However, it is not the only possibility; often far more suitable is a compromise solution in the form of central management of personal computers. No technological approach is a dogma, it is always necessary to ascertain what is most appropriate for the given customer in the given situation.

Let us turn our attention to IT infrastructure as a cost item. Falling within this area is the majority of the basic equipment: servers, physical structure of a network, from cabling

insuring oneself — the three

IT infrastructure as a purchase and operating cost: it concerns its minimisation while retaining the necessary quality.

development is cost reduction. The snag is that key systems concentrated in one place are more vulnerable, more prone to failure. The risk can be reduced by means of building proper spaces — data centres — where centralised systems are located. Naturally, these spaces must comply with the due standards and recommendations defining the appropriate manner of security. Projecting and co-implementation of such centres is one of our core activities.

The issue of IT infrastructure as insurance primarily concerns security solutions. The most frequent risk occurring in the IT sector is breakdown of a disk with irreversible loss of data, but, naturally, it is also necessary to secure oneself against other dangers — penetration of trespassers, misuse of data on the part of one's own employees, and the like. Alongside purely security solutions (including antivirus programs, protection against entry of undesired data from the internet, end station security systems, documentation of penetration attempts, etc.), we provide qualified technical consultancy services, which is also securing of a kind — an effective manner of tackling an unexpected event of any type.

By the way, our employees providing the consultancy services are highly qualified engineers who build and manage the systems, not assigned staff working on a consultancy line. Their knowledge is profound and practical, not bookish. This is always decisive in emergency situations. And one more thing: AutoCont CZ as an entirety uses the majority of the technologies it supplies to its customers. We test everything on our own, the SAI division staff also serve as in-house consultants for all our people. We experiment with novelties at our own expense, not at that of our customers.

A special component of the AutoCont SAI division's offer is systems for project management. What do they serve for? As indicated by the name, they are designed for planning and subsequent management of projects which could, on the one hand, be projects for the customer (when it concerns customised production), and on the other, in-house projects entailing organisational and technological changes, etc.

to directors and switches, end stations or terminals, the conformable software (i.e. operating systems, databases, the electronic mail and directories systems, monitoring and control of the entire information system's operation, automation of typical tasks), as well as services mostly entailing regular operational support of end users and their everyday problems with computing technology (commonly called helpdesk).

In technological terms, this area is very extensive. Work within it begins with the drawing up of an analysis of the current status and project documentation, continues with setting

and modification of technology and software — and it actually never ends since throughout the system's operation it is necessary to support it by means of qualified services. We can ensure the entire scope of the indicated work or part of it — in the case of interoperation with another supplier or with the actual customer. We have sufficient experience with all these arrangements and are able to recommend what's the best for the given situation.

At the present time, business informatics is frequently being centralised, thus resulting in concentration of the system's key parts in one place. The driving force behind this

IT specialists and managers: two cultures

Development and operation of business informatics requires two forms of consensus: on the one hand, between the customer and the supplier, on the other, between managers (on both sides) and computer/IT specialists (also on both sides). The latter abyss is deeper and is more difficult to bridge over; nevertheless, it must be done. For assistance, we provide the following lists of advice. Although it is presented in a somewhat light-hearted tone, it is worth taking seriously.

Ten Commandments for managers

1. IT specialists aren't stupid – with a few exceptions. They are simply different people living with problems, priorities, interests and responsibilities different to yours. If you cannot understand this, think about your level of intelligence, not theirs.
2. If it is the case that you yourself do not use a computer to the full, take the plunge. Buy one for home, send emails to friends, start a digital photo collection, record music from CDs on to the computer. You will enjoy it and you will begin comprehending IT matters more practically, more personally.
3. Communicating with IT specialists means understanding their way of thinking. They require direct speech, they dislike equivocation and vagueness. They have a great sense of humour, but one probably totally different to yours, so it's better not to joke with them too much. They are on the most part extremely frank, stubborn, sincere, non-tactical and tactless. Therefore, they often appear arrogant and ill-mannered. However, at the bottom of their heart they are timorous introverts. They do not understand priorities, they usually work on the latest task they have been commissioned with, not the most important one. They usually have difficulties with meeting deadlines.
4. Don't break the rules. If you require from everyone else that they consistently work with the shared information, do not keep parallel personal records and abide by safety measures, you must do so too.
5. Don't play the expert, even if you have a certain knowledge of computing technologies. Do not install programs in your computer on your own, do not repair what is not working. By doing so, you won't save but add work for a specialist.
6. If you don't understand something, don't be afraid to ask. Insist on thorough and intelligible explanation. As a result, IT specialists will respect you. If, on the contrary, you nod along to everything without understanding, they will make fun of you – and will have every right to.
7. The head of business informatics should be a member of the company management. He must have the corresponding powers and respect. Failing which, informatics only functions for its own sake, not in compliance with the company's overall business plans.
8. Key IT projects must have the full support of the management. You cannot let them be and wait to see how it turns out. Bear in mind that they pertain to many people, for some of whom it means changing ingrained habits or the entire workload. Not everyone will be excited; some can literally sabotage the changes.
9. The question of expenses is complicated. Saving on IT is necessary, but entirely in right place, not the wrong one. IT specialists will not decide which is which instead of you. You must manage it on your own. If necessary, seek a credible external adviser.
10. Always think over carefully exactly what it is you want from IT specialists and clearly communicate it to them. Otherwise there could be some unpleasant surprises in store.





Ten Commandments for IT specialists

- 1.** Managers aren't stupid – with a few exceptions. They are simply different people living with problems, priorities, interests and responsibilities different to yours. If you cannot understand this, think about your level of intelligence, not theirs.
- 2.** Familiarise yourself with how the company you work for functions, what is its basic activity, what it involves; what the company actually produces and sells. Only then will you be really useful for the company. It will also improve the quality of your own work. It is difficult to help users if you don't know anything about their workload and priorities.
- 3.** Communicating with managers means understanding their way of thinking. More than knowledge itself, they prize the ability to rapidly comprehend a new situation and take a decision. They frequently give the impression that they are manipulating you and threatening you; in most cases it concerns misunderstanding. They convert everything into monetary terms, since care of money is the main content of their work. They are on the most part diplomatic, exorbitantly positive, smooth. Hence, they often appear insincere and superficial. They very frequently change their decisions at the last moment, forget to explain why they want this or that and keep the important information to themselves.
- 4.** Don't play hard to get, and don't pretend that the odds and ends someone wants from you are big and difficult things. It won't pay off in the long run. For a while, you will be indispensable, but you will get on everyone's nerves and they will eventually get rid of you. Always make it clear what is urgent and what can wait. Don't promise unrealistic deadlines. Without waiting to be asked, provide information on how your work is progressing, primarily when it comes to solutions to emergency situations.
- 5.** Learn to explain things about IT in a friendly and intelligible manner. You will be amazed how much less work you will then have with end users.
- 6.** The company network is not your plaything. You undoubtedly need to learn a lot of things and try them out. You definitely need to download films somewhere. However, unlearn doing it at work. It is dangerously close to breach of confidence.
- 7.** The customer pays you, not the boss. That is an idea worthy of contemplation, isn't it?
- 8.** Occasionally you are sent to see a customer. No one says that you must take a jacket and tie. Nevertheless, a cleanly shaven face, washed hair, a clean T-shirt and long trousers can significantly facilitate a smooth course of events, as can social behaviour – at least to the extent that is taught and required at nursery school.
- 9.** Think of your future. You won't want to do this work for ever. The people with the best prospects are not pure specialists but those who in addition to informatics can master something else too.
- 10.** Step back when you have to.

Make a note.



This is not everything, this is just the beginning. Or rather, the beginning of the beginning. Since now it is time to cease talking in general and think about how it concerns you. If we have captured your attention, if you believe that we know what we are talking about, turn to us. With no strings attached. Perhaps we can advise you where to save money. Perhaps we will propose to you how to do something totally differently, with greater effectiveness. Or perhaps you already do everything perfectly and we will take the opportunity to congratulate you on it... but we will give you our business card anyway. Since tomorrow IT infrastructure will face different tasks and offer different possibilities than it does today.

System and Application Infrastructure Division, AutoCont CZ

Prague

Poděbradská 55/88
198 00 Prague 9
tel.: +420 251 022 611

Brno

Kounicova 67a
602 00 Brno
tel.: +420 541 144 800

Ostrava

Nemocniční 12
702 00 Ostrava
tel.: +420 596 152 529

Bratislava

Rusovská cesta 20
851 01 Bratislava
tel.: +421 263 530 111

e-mail: sai@autocont.cz

Division Manager: Jaroslav Bielek, jaroslav.bielek@autocont.cz

Sales Network, AutoCont CZ, a. s.

For the list of branch offices, visit www.autocont.cz

AutoCont's unique property is that our people do not only work at the headquarters in the capital or a few other offices. We have across-the-board regional coverage throughout the Czech Republic and Slovakia; we possess some 58 branch offices located in all regions, in most district towns. It means we are close to customers, regardless of where they are based. And furthermore: it means that we know local issues, that our people are local and credible everywhere, that they know about the problems of this or that company. Should the knowledge of one of our branch offices not suffice, there is always available the combined knowledge of what the entire AutoCont is able to do, the skills of our specialists narrowly focused on specific products, technologies and customers' spheres of business. We are both a local and nationwide company, both large and small. Such a combination cannot be offered in the computing branch in the Czech Republic and Slovakia by anyone else.

Key partners

Microsoft®



CITRIX



Selected certifications

Microsoft Gold Certified Partner

- Advanced Infrastructure
- Business Process and Integration Competency
- Custom Development Solutions Competency
- Data Management Solutions
- Information Worker Solutions Competency
- Licensing Solutions Competency
- Microsoft Business Solutions Competency
- Mobility Solutions Competency
- Networking Infrastructure Solutions Competency
- Security Solutions Competency
- Learning Solutions Competency

Microsoft Partner Advisory Council

Microsoft LAR Account Reseller

CISCO Authorized Reseller

Citrix System Integrator Solution Advisor

CA Gold Enterprise Solution Provider

HP Authorized Support Provider

HP Authorized Service Partner

HP Business Partner

HP Computing Systems Specialist

IBM Premier Business Partner

IBM Service Partner

Symantec Platinum Partner

VMware VIP Enterprise Partner

VMware Authorized Consulting Partner



Czech Republic
AutoCont CZ, a.s.
VAT: CZ47676795
www.autocont.cz

Slovakia
AutoCont SK, a.s.
VAT: SK2020224140
www.autocont.sk