# MTJ JME Fragmentation High Level Architecture

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#### Purpose and scope

- Open discussion on the different Fragmentation design solutions:
  - Which of them are easy to implement, maintain and understand
  - □ Which of them provide needed extensions to commercial 3<sup>rd</sup> parties
  - Which of them are possible to do to the next version

# Fragmentation management in MTJ



The left side abstract picture represents the different logical areas in MTJ in scope of fragmentation. Each of those areas may have a need to be extendable and/or replaceable by the 3<sup>rd</sup> parties.

• <u>Development time focused services:</u> Visual and non-visual preprocessing during the development cycle.

#### Content management:

Typically mobile content post processing for detailed marketing needs

#### •Mobile fragmentation metadata

management:

The fragmentation metadata solution

•Mobile SDK runtime management:

The development time SDK runtime & classpath management services

# Visual pre-processing (JDT) services

- This service is focusing to the JDT based preprocessing, where during the JME code editing the developer may perform all the pre-processing tasks.
- The JDT is having add-on services to visually support different fragmentation services.
- See mode e.g. <u>http://www.j2mepolish.org/docs/mepose.html</u>

#### ANT based pre-processing services

- This service is focusing towards the ANT –based pre-processing. Also this supports the JME projects compilation, preverifying, packaging, obfuscating, running, deployment and some other services.
- This provides that the whole build process is performed with help of the ANT based tasks.
- E.g. EclipseME and Antenna:

http://www.eclipseme.org/ http://antenna.sourceforge.net/

#### Fragmentation post processing services

- This service is based on the fragmentation post processing tasks, where there may be advanced features e.g. for mobile content optimization, localization, testing and marketing preparations.
- Typically these tasks are performed by the mobile Content aggregators and distributors.
- E.g. <u>http://www.tirawireless.com/jump/default.asp</u>

#### Fragmentation metadata services

- This service is focusing to the mobile device fragmentation metadata management.
- It provides the needed metadata management services through well documented interfaces and also provides extensions for data updates from external sources.

### MTJ fragmentation core services

- This service focuses to the fragmentation specific mobile runtime services.
- Like the special runtime classpath services for selected target devices and also integration to other MTJ core services.

## Conclusions

- The visual pre-processing deals a lot interaction with the JDT and as JME Polish has shown interest to participate to this area, it would be nice to start more detail discussion about the co-operation.
- The ANT/Antenna based pre-processing is covered quite a lot with Craig's / EclipseME work, it would be nice to start more detail discussion about the cooperation.

## Conclusions (cont)

- The fragmentation post processing services deals a lot with the mobile contend aggregating, post management and distribution channel providers.
- There has been some initial discussions with the Tira Wireless and it would be nice to start more detail discussion about the co-operation.
- The Fragmentation metadata and core services has already been activated in Nokia side and tech. previews are expected at the end of the January/2007.